

<210> 10091

<211> 509

<212> DNA

<213> Homo sapiens

<400> 10091

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agttaagaaa cagaacacct ttgtttaag caactaaatt aacacgtgat ggttcttggc   60
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tggacgtagt gtaatggcaa ctctcccac taaaaggccc cgtcaggctg ggcacagcgg  180
ctcatgcttc taatcccaac actttgggag gccaaagacag gaggatgctt gaccccagga  240
gttcaagacc agtcttggca atgtagcaag accccaactc tataattttt tttttttttt  300
tgagacggag tctcgctctg tctcccaggc tggagtgcag tgggtgcgat ctcggctcac  360
tgcaagctcc acctcccagg ttcacaccat tctcctgcct cagcctcctg agtagttggg  420
accacaggcg cccaccacca cgcccggnta ctttttttga tttttaagta nagacagggg  480
ttnactgggg tancnggaa tggnettna                                     509
    
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<210> 10092

<211> 539

<212> DNA

<213> Homo sapiens

<400> 10092

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aaagctttta aatttcagtt accagctcca atgaaaaaag aaatccagtc tagaacagcc   60
actctgaaag ccaaaacaaa aagagctcca aaaaactggt gagcaaagtt aagtgccttt  120
tcggaagcaa atctcgggat ttcgaaagcc tggcttttgt tttctctgtg tgaaaaaata  180
ttccagattg taacatgccg tcgcttcaag gagtttttag cagcttcctt gatacatgaa  240
aatcttggtc tctgaaagct tcagggtgtg tcttcccaga attggtttca ctatgtgtga  300
tgccctcgct ttcttccttt gggcttggtt gttccttcat cattaggtgt gagatgtgtt  360
atttatagat gcttcgactc ctgggatggc tctttgaaca cagccctgcc atgtcaatgc  420
    
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acagaaagcc ccgatttggt tctgaccggt ctigataatc ttaccgngca cagctttcct 480  
anggttaatt tgcaattaat taatttagng acaggncicc tgggttgcca acctggctg 539

<210> 10093

<211> 557

<212> DNA

<213> Homo sapiens

<400> 10093

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accatcacct gcttgaaatg gctgcaaatt taccatgttc tggcattaaa gtgatttcaa 180  
ctctttggac aaattgggtg aacagtaagc accgagattt caaattccca gatgagaaaa 240  
aaaaaattaa tcaggaggaa atttatttag taaaaattca aagctaaaga aatgtgagaa 300  
ggaagccaaa cccaaaaaac tgtaaaaaat acaatcttct ctccagaatt aggttaaaaa 360  
atacagtcaa cccattctta aaccccatat ttcttagaaa agtcaccag tcctgaacac 420  
agggtcttat acacaaatac atgtagcttg atttgcagat cagcctctgg gatccgacct 480  
tacctggccc caattagaag tcaaaaacca aaatttaggt aggnaggcag acctntatta 540  
aactcagnat cccgtnn 557

<210> 10094

<211> 558

<212> DNA

<213> Homo sapiens

<400> 10094

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gatgcccagg catcgtggag tgcctccgtg gtcactgggc acaggccacc agctcctcca 120  
gggcttgctc tcggcggttg ccatggacca gcagcacctc cttgatccgg tcctgctgga 180

agcccatgtc actgaactgc tcccagaggc gcaggaactc ccctgcctga ggaagaggag 240  
 acaggaggagg tgctgggggc tctgctgggc ctggcctcaa ccatggggag ccccagctcc 300  
 agtgcctact gcacctagtc ccaaaaagct gtggctaccc ccaggccacg tgagcctgat 360  
 cctgggccgc acctgccact tttctgtacc tgtagggtga tgtaggttcc gacctccctt 420  
 cctctgccaa ggaaagaagg cccancctg gccatgggct ctgcctgact cttcttccac 480  
 ttcttccact nactggcaac tttntgctgg ggcaagaagg ggggcaaaac cgnaccttg 540  
 acctggagga caaaannt 558

<210> 10095

<211> 558

<212> DNA

<213> Homo sapiens

<400> 10095

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 cctcagtagg ggattcttaa agaagacaca tatgcagtga gtggcttgga ttttgaaaga 180  
 ggtgtgtgtg aaggccaggg gtggtggccc actcccctcc tgngtgccca ctttcattca 240  
 naaccatccc atttattggt cttttctacc agtatctcta caaatcatct ttccatttag 300  
 cagcctttcc taggggggtca catagccacc cctnacataa agaatgaggc tnggggtcac 360  
 agacaagaca caacaatgta gccacatcc cgataaaaaa gtgttgggca agcacangcc 420  
 ttacactgga atcagaacaa ngggggaagg attcaactta ctctgggaac agaccgacnn 480  
 ggatgacca tcttgcatte ctttttttgg angganaaag ncntgaggct tcctttggct 540  
 ggnaaaaaaa ttacttgg 558

<210> 10096

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10096

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agtagagacg gggtttcacc atgttggtca gggctggcct cgaaccctg acctcagatg   60
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tttttttttt tttttttttt taacagacca aagcgtaag agtccccaaa ggagggaagc  180
cacctgcaa tggaatggca gaaccaggat gggatgaacct gaagtctcag gtgtcaagac  240
atcggcacac agacagcttg gtctctccta ccgacaagca catntgtggc cctgctgcac  300
atatgggcan aggggtggctg gcaccgtcct gccttcggca tgttccaaca tccccacagg  360
accctatacc tggaagcccc tacatcattt actgggtttt gtgacaanat ggagacccaa  420
tagagtttcc taagaggagg aaagagtcca cagaacccca cctnaattc agggncnttt  480
ggaccggtcc taacttgggg cattgccagg ccaggggctg nacccttttt tcccanagt  540
cctggcacia gccaaaaccg t                                           561

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<210> 10097

<211> 473

<212> DNA

<213> Homo sapiens

<400> 10097

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caaaacaagt gttatttatt ataaaatcag nggcttctga ttagaagact tttttttttt   60
aaaccaaata ggctcaagaa gctggctgga ggttgaattg gctgacgaac atcttcttcc  120
tccaccagca gtttgnngga cacatcacgt ttctgccaag tgctacagct gaagcccata  180
ttcatagaag caccctgaca gcccttctcc agcaacttcc agaaaacaga acctgagcac  240
tcaaagctgc atcagcccat gtggccttgc tcccaanaa gcatntggcn atttgggcat  300
gggggaacca aaagtgggca gggaattctc cttggctcct taaaagggca tgggagccca  360
gggaaaccgt tcggccccag tgcagccnta ttgggaagga nggatnggna aaaggctgct  420
nggctttttc cttcctnacc ctatggnaag ggggactggc cctttggttc ctt          473

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<210> 10098



<211> 517

<212> DNA

<213> Homo sapiens

<400> 10098

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ganacagggt ttcactcttg tcacccaggc tggagtgcag nggcacgac ttggcttact   60
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ttacaggcgc ctgccaccac gcccagctaa tttttgtatt tttagtanan acagggtttc  180
accatattgg ccaggctagt ctcaaaactcc tgacctcaag ttatccgccc accttggcct  240
cccaaagtgc tgggatcaca ggcgtgatcc atngngcccg ggccacgtct cttcctttca  300
atgtaggatg tcactcatga gcatcaattc ttcactgcat taaggaatgt gtgattttag  360
aaagtgcctg agtatagaat tgtgagggtg tggcctatgt cttangcctt ggagaaactc  420
anctagcana gaanaatgga naaagngggc ataacgttat gattgctcaa aactaaatgc  480
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<210> 10099

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10099

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ataacagaaa aatattttatg taatgatggc agctgcaaat tgattgggat gttaataaat   60
aaaaaggaac aagtatcaac tagctgcaaa tgaggaagaa accaacctac ctgaaaacta  120
caaccaaatt ctcatggcta ataagtgatg gcagtgagac catggcccta atggaagtta  180
gggcagcctc acccactgaa atgttgttta gttggagctg atagcctcag tgttagataa  240
aaattgtgca acacctgagc aacaaatfff tttttttttt ttttggaaat tggcatgtat  300
tctgcaaaga cttgttttag gccagtttta ccccatctgc taaacgcaat gcatagtctg  360
tatcaaccag aagaacccat ctctaaaaac atcaatgttg atagtcaaag accactgtgt  420
tagaacccaa aatcagggtt tggatgatta cctacattag acagagcaat ggtggcacan  480

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gcttgagcat gacaatggct catatggttg acncaaaagt aaccaattct nggtgcnttc 540  
aggaggaatg cctgct 556

<210> 10100

<211> 536

<212> DNA

<213> Homo sapiens

<400> 10100

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agcaaggtat accttttaca gacaatagt gctctgagcc aaacacgagc tcatgtgagt 120  
tgttacctaa tgggcctcat gtggtgtggt tacataacga gcaaggttgt gtgcttgcac 180  
tccaaaccca ctgagtcatg ctgcaccaga aggctgcctc agcctactcc tgactaaagc 240  
acagccattt cccttacact acaccccta ggctgagggc gtcctccagg cagggacaca 300  
tgcctatatg gcgagagcct gaggccataa cccacaacaa caatacagag agcaacagct 360  
cactactagg atctcagcta tgatacttat gactattagg gcccaatgta cgccagaacc 420  
tagggatgct caccatctnt gcaaggggtt gacagtgang cttttcagtc accttaatct 480  
nctggaanac ccttttgaag gctggtggta tggctctgctg aatgncangg ataang 536

<210> 10101

<211> 551

<212> DNA

<213> Homo sapiens

<400> 10101

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ntaaagcagg aacagcaaac agatTTTtcc atcacatgac accctcagct gattggccat 120  
aactgccttg actgctgtgt ggacaaagat tccaaggatg tactttggct ccatgggaag 180  
gactactgca atttatttagc ggtatctgta aacatgggga ataaatctga aacctcacta 240

gccatacgag aagccacagg caccaanact ggcggntcca ctgccaaagc cagcactggt 300  
 gctcgggtcca ccaccaaagc cagcaccagt gtttgggtcca ccgccgaagc cagntcctgt 360  
 gctcgggtcca ccgctgaagc cactggtgct tgggtccactg caaaagccaa caccagtgt 420  
 tgggtccaccg ttgaagccaa caatagaact ggggccacta ctgaaccccg tgctggngct 480  
 gggttcncag taaagccagt gcttgggggtt ggaaccctgg cnaagccaat ggtgggccta 540  
 aacctttggg n 551

<210> 10102

<211> 547

<212> DNA

<213> Homo sapiens

<400> 10102

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 ccctagttaa accataaaac tttataaaca ttgcttttagc tttgatgttt gggtcacgttt 180  
 gttgtgcana agtcacgttt cagggtaggt tcaccgccag acacggtcac atcaccattg 240  
 gctgnggatt tccaagaagc aaaggagcca atctcagcaa agctcgcact ggcattttta 300  
 gctgcttaaa tttgaagagc agttcagcaa agcttgnct cccttctagt cctatagggt 360  
 gcagggtgtg tggagctggc acagagtggg agacgaggaa caggccagca tgctcagctg 420  
 ngattcctcc aanggtgnc cgctgangta ngcgtgcaca cacattttac ccccgacttg 480  
 gacccctggt ccagggatta tcaatggggc nctttacaac agggngggaa ttccagttcn 540  
 taaaaac 547

<210> 10103

<211> 462

<212> DNA

<213> Homo sapiens

<400> 10103

ccttttactg cccatttatt accgtgcggg ttaaaaaacg ggaaaagagg cggggcgtgg 60  
 tggctcacc cctgtaatcct aacacttcag gaggctgagg caggcggatc atgaggtaca 120  
 cgcccaggga agagaaggga cttgtccaaa tgtcactcaa gtacttggtc cataacatta 180  
 agctttgtaa ttcaccaggt taaatgtgac atcactgttc catccaccct accaacactc. 240  
 caaagaaact caacttcctg ttccctcttg aggaagtaaa acttaccaga taaaaagggg 300  
 aacgaggtgg tggggggggg ctggccgtcg aggccggggg ccaccaaacg aggtancagt 360  
 ggagggangg ctgggggggac canaacgcaa tgtcagngtg tcaggctcat ccttggaaac 420  
 aggcanccg ggataccatg gtgacaggca agggancggn cc 462

<210> 10104

<211> 531

<212> DNA

<213> Homo sapiens

<400> 10104

gagatggaat tttgctcttg ttgccaggc tggagtgcaa ttgcgcgaac actgcaacct 60  
 ccacctccca ggttcaaaca attgtcctgc ctcagcctcc cgagtagctg ggattacaga 120  
 tgcctgccac cagccccagc taatttttgt attttttagaa gagacggggt ttcaccatgt 180  
 tgaccaggct ggtctcgaac tcctgacctc atgatctgct caccttggcc tcccaaagtg 240  
 ctgggattac aggcatgagc cactgcacct ggccatattt ttttttttgg agatagggtc 300  
 tcactctgct gccccagctt gaatgcagta gagtgatcat agctcactgc agcctcaaac 360  
 tcttgggctc aggtgatcct cccatctcag cctcccgagt agctaggatt acgggcatgc 420  
 gccaacatcc ctggctagtt tttaaacaat tttttgtana aacangggct tgctatgtgg 480  
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<210> 10105

<211> 564

<212> DNA

<213> Homo sapiens

<400> 10105

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cagtgtcttc agtgaagttt actgtatatt ataaacagtc atagaattca aagacaatca 60
tataaccaac tcttttggat ggcttaggat gtgccaggta ctgtgctaag gacaagagat 120
ataaccagat acaaaccagt ccccatcctc aatcattact tattcactca acaaataatt 180
ttgagtactt accctgcacc aggactagg gatataacag ataaaaatta agtctctcgc 240
ttcatgaagc tttcattctg atagaggag acaggcaata agccaaataa atggtttatt 300
ccaccacccc ttcaagtctt cactcaaagc ttcctttttc aatgagacta tataaccaac 360
gtatttataaa tttcaaccac catcctgcat tcaactgctt tcatcttgct aaggnagtta 420
atatgtgtta atttgactga ccacaaggng cccagatact tggncaaaca ttatgcctgg 480
gngngctgtg aancatggnt ttggatgaga ttaacatttg gaatcagtc cctggataaa 540
gcttattttt ttttcccagg ggna 564
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<210> 10106

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10106

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gagatggggt cccgctgtgt tgcccagggt ggagtgcagt ggtgcgatct tggctcactg 60
caacctccgc ctcacgggtt caaggattct tctgcctcag cctcctgagt agctgggact 120
acagggtcgc accaccacac ccagctaatt ttttttgtat ttttagtaga gacagggttt 180
caccatattg gccaggctgg tctccaactc ctgacctcat gatccgccc cctcgacctc 240
ccaaagtgtt gggattacag gcatgagcca ccacaccgg caatttttgt attttttgta 300
gagacggggg tcttgctatg ttgtccgggc tggctttaa ctcctgacct cgagcagtc 360
tcccaccttg gcctccaaa gtgctgggat tatagacatg aggcacggag cctggctctg 420
tctccctctt taatgagtaa attttataaa ttgccaacct accactagtt agtacacagt 480
gactgtagtt gtcanaagct taaacgtgta tctgggcata cgggttcttc tgnnttctgg 540
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ggagcacttt cctn

554

<210> 10107

<211> 539

<212> DNA

<213> Homo sapiens

<400> 10107

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 tacaggcaac cgccaccacg cccggctaatt tctgtatatt ttagtagaga cagggtttca 180  
 ccatattggc caggctggtc tcgaactcct gaccttatga tcccgccaca gcctcccaaa 240  
 gtgttgggat tacaggcatg agccactgca cccggcctgt gagttactta tttgtttcgt 300  
 gtattatctg tctcatcccc actagaaagt cagctccatg aaggcagcaa tgtttgtcta 360  
 ctttgttccc tgttgtctcc aaagtgtcta gaacagagct ttgggcctgg gtggccctca 420  
 caaacagtaa cngaataaat gaacncagac aagganaaan ggctntgaac caaacttaca 480  
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<210> 10108

<211> 539

<212> DNA

<213> Homo sapiens

<400> 10108

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 gcacgccacc acaccagct aatttttgca tttttagtag agatgggatt tcaccataat 180  
 ggccaggctg gtctcgaact cctgacctca agtgatccac ctgcctcggc ctcccaaagt 240  
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tgagaggctt tgagtctaca gggcattctg gggttacttc tatctctttg agcctatgac 360  
 tgtagaatgt aggatgtgag gttctagaat ctttttatga agccngagga atgncccttt 420  
 aactttccat ggccctcaag tgtgtgggct tctgntgcaa ggnctcatgt ctttaagtgag 480  
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<210> 10109

<211> 439

<212> DNA

<213> Homo sapiens

<400> 10109

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 caggtgctgg tcgtaggctg gatgtgttga atttctccat gatgggggtcc actgcacca 180  
 ctgtggccag gagagcagaa caactagtct ctctccacc atccagaaca gtgcctcttg 240  
 cagagtctcc tcgggaaact taccaagtct gatggtaaca ggggcatggg accatcctaa 300  
 ctgggaagac aaaaaggctg agaccttccc agagtcacct tgggagtgag catgggaaca 360  
 tggctgaaca ccaagacaga gccaggctgg actgcagtag tgcaacctng gccactgna 420  
 cctnccctn ccgnttnan 439

<210> 10110

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10110

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 ttcccaaggt gccacaggga agccaaaaga ttggacaccc tgttctagat catcccatcc 120  
 agtagtggtc aaacttttat ttttacagct aaattcctca agcagatggg ctctgtgtg 180

gaatcacaat gatgctggtt aagattcact gaatgcttgc tatatatcag gctctgtttg 240  
gagcccagca tatatatata tataatctca gttaatccca cagtacctga tgaggagggt 300  
actgctgttt gtcccattta ttttttattt atttatttta ttttattttt tttgagatgg 360  
agtttcactc ttgttgccca ggctggggtg caatggcgca atctcggctc accacaacct 420  
ccgcctccca ggttcaagca attctcctgc ctcagccttc caagtagctg ggattacagg 480  
cacgcaccac catgcccggtg taatttggtg tcttttttan tagaaaatgg ggttctccat 540  
ggttggtc 548

<210> 10111

<211> 546

<212> DNA

<213> Homo sapiens

<400> 10111

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cctacctcag tgacctcaaa acacaaggac atctccatag ggcatcaaca tgcactctgc 180  
atccaagaat ctaagaactt cctgatcctt ccacattttc tatcaataat attgccttct 240  
gaggttatgg attccaggtc ttctatgaaa taggtaaagc ttcctttcgc gttccaagaa 300  
atatagtttg cgaagggaac tggaaaacgt gactctaggc ctcagccact tcctctgtta 360  
ccctgtgcaa gttgtagaac aatccacgtt ctcacagctc cccttcttca agttgtggag 420  
ttcttcaagg tggacagatc acacctcagg aagtcattcc ttgnagccc actagaatta 480  
tcataaangc agtcgggctt ggtagttttc ttgnnccag catcactgng ccaccaenta 540  
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<210> 10112

<211> 549

<212> DNA

<213> Homo sapiens



<400> 10112

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ttatatgaga gcacctgaca ccaggtactg acgcttatga gcaagacacc ttgtcaacca 120
tagggagact ggatgaggat ttatataact caggtgtatg accaagtctc ctttgtctga 180
caggccttat tatgaatgag tgtggtagt agtaagctct aagacagccc ccagggatcc 240
cagtctcctg gtgctcacac ccttgagagt tcctctgctc ctgagtgtgg atgaaacctg 300
tgacttcctt ctaaccatca gaatccagca aagaccgcgg gatgtcactt ccatgattac 360
actgcacaag gttgtaactg ctgtcttggt agactctcca ctgccttctt ggtttacatg 420
ctttgatgaa ggaagtggcc atgttganga ngttcacgtg gaaacaaact gaaggtggnc 480
ttcacagatg gacagtncca actaagggcc tcaatccatc ncttggangg gaaccaaate 540
ccacaacct 549
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<210> 10113

<211> 466

<212> DNA

<213> Homo sapiens

<400> 10113

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agatcgaatt tcactctgtg acccaggctg gaatgcactg gcacgaattc agtccctgc 60
agcatggacc tcccagggtc aagtgatctt cccacctaag actactgagt agctaggacc 120
acagggtgtg cccaccatgc ctggctaata attttttttt tttttttgct agacacaggg 180
tctcaacatg ttgcccaggc tggctctgaa ctctgggct caagcgatcc tcccacctca 240
gcctcccaaa gtgctgttat aagcatgtgc caccaccac tctggccttg atactctttt 300
ggtaaaaaat atactagtat tagcattctg tggccaggaa tgggtggctca catccatctg 360
taatcccagc attttgggac gccaaaggcc gaggattgct tgagcccagg agtttgagac 420
cagtttggag aatatggcac actgtttctn cnaaaaninn attntn 466
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<210> 10114

<211> 547

<212> DNA

<213> Homo sapiens

<400> 10114

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catctttgaa gtccttttatt cccagcagtt cacatcagtt actcattgag ctgggggttcg 60
tcatattaac caagaattca ttcattcttc ttttgatatt gtaatcttgt cctcatctcc 120
acaactgagt tggggcctga ggggtttaag agttctcact ccatcacagg aggcaagggg 180
tacccttggtg aaccagactt caactcctgg aagtcttggt cagttcatag gcaaatatct 240
ttgcaagttt agtatgagac agcccaacgg ttaaataaat aagacacagt gccatgggtc 300
taggcatttg gagagggaaa aggcacatta cacagattcc cctggagaaa atacaggcca 360
ttctcatctt ctcaacatgc attttccac tcttcagcga cttttaatct tatcccctgg 420
tctatgagaa accataaccc acgtgctact gaatacattt ttattttccc ttcattgacat 480
anacttgggt tccagtatat tttaatttcc tccntatgnc tacaagacat ncaantttgg 540
tcagggc 547
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<210> 10115

<211> 553

<212> DNA

<213> Homo sapiens

<400> 10115

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agagaaagtc tggaggttta ctcaacaacg ttcacaatca caattgtaca tggtaaataca 60
gtctttcaca aaggcttatt tttccaggca ggaggagagg ctggtggtct tgagcttttg 120
gcctggaatt ccagtctgaa ttttcaaata ttccctgcct ccaaccctt tgggataccta 180
gtcttcaagc caataacaga gcaggagtct gaccctgttc tgttgctgg catggctgaa 240
tcaaagccat tctggaagca gatgttaagg tgaacttgct acttggtatg taggtccgac 300
tcccatccca gaggtggcag tgggccttgg ctcaagatca agtttgaact aaaatattac 360
ttggattttt cacaagaggt gtccgttgaa agcaataagg aattccagaa cagaactgca 420
```

cttcttgtcc ctctctcaca cttacaaagc ttcagaaaac attaaaaatg cattacctct 480  
 aggaattcna aagatcaccc aactgtncaa actagatatc gctgaagcag aaactctgan 540  
 tcctcagtac tac 553

<210> 10116

<211> 578

<212> DNA

<213> Homo sapiens

<400> 10116

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 ggtgaggatg gtacttaaat aattatttat tgagttgctt acagaagaga ggtctcccaa 180  
 gtcccaaate aacttcacaa atattttatt agtacttaca atatacaaaa acctttttct 240  
 aagctctgcc ctacagatta ataaaaagga gcttaaaatg aagggaagga gagagaaaaa 300  
 gacaaaagat taatacacaa gttatggtac ttctaagcag gaaagaagct gcttaacttg 360  
 gttgggatgg gagaggggtg gtttcaagcc agaagctgaa cagcatgttg agatgctaaa 420  
 ataaggaaga tattccagaa agaggacagg cacagaatct ccacgtgaaa tttcctgtag 480  
 actagtaaga aaatcaagtg agatcaacag gagaaagatn taagaagaaa actccanggc 540  
 caggcacacg gntcatgcct gnaatccagc ctttngga 578

<210> 10117

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10117

ccattaatct ttctggagaa cctagatcct aagtcgaaaa acctactgaa gtatatcaca 60  
 acctgtaagt aggtacagat gtctgaggcc tatttagaac aacagtgtta gaaaggcgct 120

tccttacctg ttagacaaag gcgacttccg gccaaaccca attgccccca ggatcccaga 180  
gctgagtctc tcctcagcca cgaggttctg cctgtctctga accaagagca gaattcgaat 240  
gacagattct gtcaggacgg agtcattctg ctctgtctga atgagggaga gctgaaggac 300  
ttggtgccac cacaaaaaca gctttgcctc ttcctccacg gagcttgggt acacctgttc 360  
cagccacttg ctttaagatga gcagcacttt catttcattc cttaaagtct gttcgctgtt 420  
taaactctga agcaagtaga cgtaaagagt caagtaactg cccaaggtga ggcactcctg 480  
caggaactct tccatggatga gctcgggaac ctgaagggat ccagaatggg tccccatcct 540  
gaatctgatg gagagggcnt 560

<210> 10118

<211> 569

<212> DNA

<213> Homo sapiens

<400> 10118

gagacggagt ctgctctgt caccaggct gggatgcagt ggcgcaatct cggctcaccg 60  
caagctccac ctccggggt ctgccattc tcctgcctca gcctcctgag tagctgggac 120  
tacaggctcc tgccaccacg cccggctaatt ttttgtgtt tttagtagag atagggtttc 180  
accatgttag ccaggatggg ctcaatctcc tgacctcgtg atcggccac ctcggcctcc 240  
caaagtgctg ggattacagg cgtgagccac cgtgcacggc caattatttt atttttcaaa 300  
cctaagagga gctcccaata tgaaagtatt gtcagcaagt tttctcataa aatgagaaat 360  
cttgtaaatt aaacaaatca caaattggcc tgctttgcac atccagagtt tcatgacctc 420  
tagctaataa agatgccccat gtttgctcag gtcacatgt gttgggctcc tggctgggca 480  
tttcangcac atccatgcta tcatcatccc tattcttcaa gtgaaggata cttggggctc 540  
anaanagggt cggngacttg gctaangnc 569

<210> 10119

<211> 437

<212> DNA

<213> Homo sapiens

<400> 10119

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gaaattttta agctgggtgt ccagggcaga catcacatgt tggcaggttc tgtgatgccc 60
cctgagccat aaaaccagca aattttttat tagtgatttt caaaagggga gggagtgtcc 120
aaatagggtta tgggtcacag agatcccatg cttcacaagg taataagatt tcacagggtta 180
aatggaggca gggcgagatc acaggaccac aggactgggg tgaaattaaa attgctaatt 240
aagtttcggg catgcattgn cattgataac atcttatcag gagacagggt ttgagagcan 300
acaactggtc tgacaaaaat ttattaggca ggaatttcct cgtcctaata agcctgggag 360
cactctgaga aactggggct tatttcatcc ccacagntgn gaccataaaa gacagntgcc 420
ctgaancanc cntttna 437

```

<210> 10120

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10120

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cattttactg catttngctt tattgcgctc tgcanatagt acatttttta caaagngatt 60
tgnggaaacc ctgcagcgag caagtctatt agcacatttt tccaatagta tngtctcact 120
tcatgtctct gcgtcacatt ctggtaattc ttacaatatt tcaaactttt tcattatcat 180
catatctggt atgatgatct gatcagngat ctttgacatt actattgtaa tagttttgga 240
caccacaaac catgcccata taagacagca aacttaatta ataaatgttg tacttgttct 300
aaccgctcca tcaacaggcc atttccctgn ctctctccct ctcttcagge ctccattcc 360
ctaagacaca atattgaaat taggccaatt aataaccttt tgatagcctc taagtgttca 420
actgaaagag ttacaggatc tcacacttta aagcaaaagc tagaaacgat taaagctttg 480
agaaaaaggc atgccaaaaa tggagatagg ccaaaagngg agctctttgg accaattagc 540
caagtgggaa aagg 554

```

<210> 10121

<211> 562

<212> DNA

<213> Homo sapiens

<400> 10121

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gaggactgca aggcacaact gtgcagacag gcagagaagc ctcagcacct gtgggaaagg   60
aacgaatcca tttctgtctg ctcatattccc acccatgagt gtggacagcc ttcctgtccc  120
tggagtgtcc aggcctgcct ggactgagtc tgtccctctc cctccccttg caaaggctga  180
gagtgttctg gatgtggctc tgaaagaatg ccaaggtcta tcaggtgggt ccaccacagc  240
cctagcccag gatgtccctc acctgtgtcc attccccccag caaagtcctc atcataggag  300
tcatcagtgg agtcctcgcc atccaccgaa gaccatgctc ggagcttggc ttccgcgatg  360
gcaaactgct cagccactcc tgtcgcaggg acagaatgca taagcagaga aggtgagtta  420
agtctagggc tcagcttgaa gacaggagag aggagaaaca gggtatggga agactccaac  480
ccccatgtca nacccgagga gataaagaaa gcaccctggc cgggtgtggtg gcttaagcct  540
ggaancccag cactttngga ag                                         562
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<210> 10122

<211> 386

<212> DNA

<213> Homo sapiens

<400> 10122

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atcattttat gaactttaac catagcaaat gggtttttac ggnagtcata aaatcaacat   60
taccacatat acaaaggaca agaccccagt ttggcataca aaaataccat atattaaaat  120
tgggttcatt ggaaaactca ggactggcta aaacaccatc tataacagag agagcaagca  180
agaatgcttt taagacattc agatttataa acagcagctt gatatcccct ttacgaagtc  240
aatatttggc aacatttggga caatatattc tacacagccc agcagctcat ttatctgnag  300
ggctatttgg cccttaaaaa aaaaaaaaaa aaaaaaaaaa aagcncctaa aataaataat  360
```

ccnnataatt gnaaatgaaa cncatn

386

<210> 10123

<211> 546

<212> DNA

<213> Homo sapiens

<400> 10123

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gggatggagt cttgctgttg cccaggctgg agtgcagtgg cacaatctcc gcttactgca 60
acctccacct cccagggttca agcagttctc ctgcctcaga ctcccaagta cctgggatta 120
caggtgtgtg ccaccacact cagctaattg tttttttatt tatttttgag atggagtgtc 180
gctctcttgc ccaggctgga gtgcagtggc gccatctcgg ctgactgcaa gctctgcctc 240
ctgggttcat gccattctcc tgcctcagcc tcctgagtag ctgggactac aggtgcccgc 300
cgccatgccc ggcttttttt attttttttt tttttttttt ttagttttg gtaganacgg 360
ggtttcaccg tgtagcccg gatggtcttg atctcctgac ctcatgacct catgacctgt 420
ccgcctcggc ctcccaaagt gctaggatta caggcatgag ccactgtgcc cggcttgat 480
tggattttag caganacggg gtttcactat gttggccaag ctggctcaaa ctggtgactc 540
aaagaa 546
    
```

<210> 10124

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10124

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gtaaatacaa actacaccta gaaaactgct ttctgaaaca ttccttagtc tgtggctcac 60
ctaataatcc tcaactcaacc ttatcaggag gtaaggattc tgtctgaact caggatccat 120
ttggatcggg ggcctaccta tgggcaatga gaggaatcat attaactgtc actgtccatc 180
ctctgagtct ttgtagtttg tagtaaaata catactgtcc catataaaaa atgagaattg 240
    
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tgttacccta aatgtcagat aatttgggtgt ttcccagctc tccagctcta aagaatctct 300  
gctgggtatc cctttatgtc tggaaggaga ctgtcagctt ctggtatctg agacctgtgt 360  
gccctataac atctagttat ggctatcggt cttactaggt ttagggatac ctttctgtag 420  
gaattaagag taaacacaga tcttcagagg caagagtttt agaacttatt gaagactttt 480  
ggcatatgga aacttcattc aacaaagagt gccccttaaa aaaaatctct actggcattg 540  
ggtatgggga tctgcc 556

<210> 10125

<211> 544

<212> DNA

<213> Homo sapiens

<400> 10125

gagactgagt ctactctgt caccagggt ggagtgcagt agtgcaatct tggtttacag 60  
aaacttccgc ctctgagtt caagcaattt tctgtcgca gcctcctgag tagttgggat 120  
tacaggcacc tgccaccatg cccggctaatt ttttgtattt ttagganaga tagggtttcg 180  
ccatgttggc caggctggtc ttgaattcct gacctcaggt gatccactca cctcggcctc 240  
ccaaagtgtc gggattatag gtgtgagcca ccttgtccgg cccaaactga cattttatag 300  
ggatttttca tccttaaagn gatctactca gctcatttct tccaaatctg nattttacag 360  
cacactttaa actggtgccg cagagttttt gagtgggtgat ggcagctgcc ctctatgtct 420  
gtgggtgtgc ggccctcat gctggggaaa gaggggacgt gaccctaccc ttacagcagg 480  
ctggcctcct tctntncca aactggcggc cctgntctgg gctaactagc ccaatcctag 540  
cctn 544

<210> 10126

<211> 559

<212> DNA

<213> Homo sapiens



<400> 10126

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gagatggagt ttcactcttg ttgcccaggc tggagtgcaa tggcacgatt tcggctcact   60
gcaacctctg cctccccggt tcaagcgatt ctctgcctc agcctcccga gtagctggaa   120
ttacaggcgt ccaccacat gccagctaa ttttttgtat ttctagtaga gatgggggtc   180
caccatattg gccaggctgg tctcaaactc ctgacctcag gtgatccact cgccttggcc   240
tcccaaagtg ctgggattac aggcgtgagc caccgcccct ggccaaggcc ctactttcta   300
aaagaggaaa actgagacca aggaagggtta atgagcacat ctgtttctcc actcaaggcc   360
agcggtgaga aacggcagag ccgggcaccg gtaccttggc ttcaggcaag tcacccagca   420
cctctgggct tcatactccg tttggaaaat gcggatgaca agaacatccc ccatccagcg   480
gtcccactct ggngaattta ttctaaaagg gaaaatccaa caggntttgg tctggggatg   540
agtcatcgan gcttnatta                                                    559

```

<210> 10127

<211> 572

<212> DNA

<213> Homo sapiens

<400> 10127

```

catgaagacc agtttatttt acatgcttgc tttcacattc tttactggga atttaaggcc   60
ttttttcagc ctttaacttgt ataccaacct caaggatttt gtttgataca gaaaaggata   120
gggctgggccc cttctgcaa ggactgataa cctgcctgcc aaaaggaaga gggaatgaaa   180
gccttttgtc cttctaggcc cttacagta cctcaaaatc taaaggcctt aaaggggaaa   240
aaaaccgtat ctgttttttc tccttatctc ctacccttct ctttaagcat attgaagatg   300
gacttttttc caaatgttta tttgtaggaa gaggtgatga gcgcaggcca gcagctgaga   360
acttacagct ttgatgcacc aggaactgta ttcaagctga gggcaaaagc ctctaggga   420
gggagccagg tccaccaagg ccagagacag acagggcgag actgtggaag gccagggaga   480
tgctgcctgg taaatgctca gctggcctac tgggcaagtc ctctgggggt tctagagctg   540
atnggaanaa ggagtcattt tgatagtccc gn                                                    572

```

<210> 10128

<211> 566

<212> DNA

<213> Homo sapiens

<400> 10128

```

gagagtctcg ctctgttgcc caggctggag tgcagtggcg cgatcatggc tcaactgcaac   60
ctccgacccc ggcgttcaag caattctcct gcctcagcct ccctagtagt tgggattaca   120
ggcatgcgct accaagccca gctaattttt gtgttattag tagagagggt gtttcaccat   180
gttggccagg ttggtctcga attcctgacc tcaagtgate cgctcgctcg cctctctacc   240
ttccaaaatt ctggaattac aggtgtgagc caccacgccc ggccagggat gtggttttat   300
aaactatgaa ctaactctcc atgctatgtt gttcttgtta attcatttct ctcatagata   360
attaaaaaca aaaaacaaga aaacaaaatc caacaagcag gcataagatt atatgggagc   420
tttattaact aaatgcccta ggttatattc aaagcagaat caccacgac tcctcaggag   480
actgcancat ggggtaaaaat tgggtgnact ttgaggacat tttggatata ctaatgaaac   540
atggaccttc ctggggttct taangc                                     566

```

<210> 10129

<211> 568

<212> DNA

<213> Homo sapiens

<400> 10129

```

ctgagacaga gtcttgctct gttgcccagg ctggagtgca gtggcacgat ctcggctcac   60
tgcaacctct gcctcccggg tttaagtgat tctcctgcct cagcctgtgg agtagttggg   120
attacaggcg cataccacca tgcccagcta atttttgaat ttttagtaga gatgggggtt   180
catcatgtta gccaggctgg tctcgaactc ctgacctcat gattcacctg cttcggcctc   240
ccaaagtgct gggattacag gtgtgggcca ccacaccggg ccaaggaaaa cttttaaaaa   300
ataagtttag tgtcacctaa gtctacagtg gttataaagt ccacagtagt ggacagtaat   360

```

gtcacaggcc ttcacattca ctcaccatcc actcatttac tcacccagag caaattctag 420  
 tcctgtatta caagctccac tcatgggaac catttttaaa atcttttata ccatattttt 480  
 cctgngccat ttctatgggt agatactgaa tccatcggt tcaattgcct gtagtantca 540  
 aggacaatca catgcttgac anggttgg 568

<210> 10130

<211> 550

<212> DNA

<213> Homo sapiens

<400> 10130

ggatcataag tatcttcaag accaaaataa ttttctactc ctgagcatgc tcatttggtca 60  
 aaggaaggaa ggaatcataa tagcgtaaat aaggctagcg tcttttcana agttggttct 120  
 ttgngccagt cttggngcta gacacaccga taggaanaaa actccttcac atccccagga 180  
 caccaacatg ggatacggtt gatcatcatt ctttaatttg anaaggagaa ataggctcag 240  
 tgagatgaaa tagccactcc agtggcaagg ctgggactgg aagccgggct tgtcctgatt 300  
 ccaaattccag tttctttcca ctgccacgga gacggagaga agggacagng gccccanattg 360  
 gggatggggg gactggatgt gggcaggcct gcgggggaag agtgcctct gttgagcatc 420  
 cgaatgatgg cncagaaaa gaaaactggg canaatccca gttattaaaa tcccctgagg 480  
 ggaacaggtc accccgaccc ctnaggcana agangggggg gaanacaagg cccatanatg 540  
 aaggccctgg 550

<210> 10131

<211> 448

<212> DNA

<213> Homo sapiens

<400> 10131

ggtttttttt tttttaaca tntacttatt tccattttta tgaanaatta aaggatncaa 60

tgggttaaag acncatttaa aatactagca agggattaga cagacgaatc aaatittgnt 120  
 gatatcccaa ataattacaa gagacttcga aaatgtagn naattcaggn tttctttcca 180  
 gtttaaaaat ttctatccat tgcctctatc ttigggnca ctgccaccaa taaacncagt 240  
 ntacagctta naaacctaata tactatcttc aactaggaaa aggnaaacca acatcatttc 300  
 tttaaaatgn gaaataaaga atgngatcgn acttaatttt ggctcatggg cccacaatac 360  
 tntgaaatgn catgccnaaa tgtaaaagtt caaaaggga cttatcatt tgctataatt 420  
 gnccaaaaaa tttagctctg nacnctgg 448

<210> 10132

<211> 569

<212> DNA

<213> Homo sapiens

<400> 10132

acagtacatg aatgttttat tcttcataaa gtgcitaaaa catgaagaag aagctcttta 60  
 taaagagcct taactaggaa gacaaacagc aaagcagaac catgcctgca ccctgccccaa 120  
 cccacctgca actttcctcc aagtgtggct cggagaagaa acatcaacaa ggaccctggg 180  
 cttcgattca aaaactcctc tgaagccatc catgccctgg gcattaggga ggcccacaaa 240  
 ggtcagggcc agggctggga gtgaataaag cccagaggaa tccccagtag ggggggtgac 300  
 tccccctctc tcagaaaaga tacttacttc tctaataccc aatgaccccc aaaagcatga 360  
 ctgaaaccct ggggaacagt ggatactttt ctcagatttg atgagtggag ttttaaggtag 420  
 gtaaccgtta caggggcttt cctccatgtg tggcgctcct ctgctccatc ctggcagcag 480  
 acagacatca cccaganggc acgtgtctgc ctgangcctt tcaaaagcaa gcccacaagg 540  
 ccctttcttg aaaaaatggn ggncccaaa 569

<210> 10133

<211> 363

<212> DNA

<213> Homo sapiens

<400> 10133

```

cccattgggt gacagcggtt attgaaagga aatcttgctt tatccaggaa ttcactcaca   60
tggaggtagc tgcaaggaga atgtctcttt ctcatgacaa ccaaagcgac caaaccatac  120
cctaaagcag agacncaatg gaataagtca acgggcattg tagaacgacg ctcagaagca  180
ggaaaaacca taaaagatac aggatgattg tctcttcagt attgcatttg gccatgtatg  240
tgtttttaca taaaatatat gttttctttt taagctagct aaagaaaata ctcttgatcg  300
gggttagttc ttaaagcaaa aaacngaana aaangttgga tananaataa aantaaagaa  360
ccn                                                                    363

```

<210> 10134

<211> 433

<212> DNA

<213> Homo sapiens

<400> 10134

```

gcctcttttg ttaaacagca acagagctct gccactttgg ccaaccaccc tcctttgtcc   60
tcttcctttt ccctcctgcc aagtgtccta ttctcaaaag gtctaaatca ctgccttcca  120
gcttgggtggg caacctgctg ggggccccaa gtgaggtggg gaggggctcc ctagctatit  180
cccagtgacc tctatcacat catcgtcttt atcctcatca tcattggagc tgaacccaac  240
ctcggcaacc tcatgagagt caaatggagg cacctgggac cgtaggaggc caccagctgg  300
gtagcctgca tgtgggggaca tgtacctgga tagatagaac atgccccnca aaaggttggt  360
ggncaaaaca gggaaaggaa aaggcncaaa catcctgggt tngancagaa ttggctggna  420
aantggaagt gaa                                                                    433

```

<210> 10135

<211> 551

<212> DNA

<213> Homo sapiens

<400> 10135

```

ctttgtcggtt gttttattta aaatgttatt gtctctgatt agaaaataca gtcattgaggg 60
ctaaaaactg aaatgatgtg aaaaggcatc cattaagcag tgttgcccca ccaccctctc 120
catcagtcctt gtctcatggg gatggggaaa atgaagacag aacgctttgc cttgctttgc 180
aatccctcct ttgaaggcct tctgtcccag gaagccaatg ttcatttgat gtggaagagg 240
gacctgtgtt taaccagaag ctgtccctccc tcatcccttt cccatggctt acacgcagaa 300
gggagaggag atgaccagag gagaaatcag ggggaagaaa aggcaacagg ggaggcaaag 360
gggaaaggag aggaatgctt aaaatatacn gngaaatttg agtaggatct ctactcaaag 420
acttctntgg gaagtgtcca naattgacca cccaggtgct gacggtngaa agaaccnnga 480
cccaaaaccc tggactagtt gcnttaactc cattagccct gagttnccct tgnaaaanga 540
aactgggggg c 551

```

<210> 10136

<211> 543

<212> DNA

<213> Homo sapiens

<400> 10136

```

aacgtgaata atgctgttat tagagttgaa gagaagccct tagaaatggg acaaacattg 60
taattctctt agagaactgt aacttaaaca gaaatacact taatagaaga ggaaagaaaa 120
tggttcatgt gacacaaagg tcccatgtgt tgacttcttt ggtaagatca aataagtatt 180
taagcctagc aatagggtca gtccagttag tatttctcct cacaaatggt gaatatcaac 240
tccaggatgg ctggagtttt ctcatggttt ggttccacgc catctgcatg tctttacaag 300
tgataaaaac cggaattttc cagctgctac tagtcacagg ggggtcccaa tatgggttgt 360
ttaattatga tgacgggtcc tgtcaattgc atccagtaaa attggtcaca tagagaactc 420
atctaaaact gagggtttgn tgtggttttg aaaggccatt ggaatccaga tttgcaaagc 480
atgtcaaggt atggcaaaac atatgccacc catnttaaaa actttcctta taatgnanga 540
ctt 543

```

<210> 10137

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10137

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ccttttaatg ataatgattt aacttagaaa tctgttgtga aacttttgtc tagttttgca 60
attctcagat attccagtgc aaaaatagat cccgttacag acagcgtaaa gtgcttgga 120
tgagggccaa tgatgaacaa agagcacaaa aacagcttca tcttagggta taagaaggga 180
taatagcata cctaaatcct tatggaaata gaaacattct aagggggatg caacaatttt 240
gaaaagaatt agagcaatat ttctacagta ttacattatt actagtagat aataacaagg 300
gtacaaatta atgtctcaat atcaaagtgg gttcagtatt acatgacaca tggctctttg 360
gaaaatattt tacctgatat atacaaccac aagaagaaaa cacagataaa tggcttttagt 420
caatgattac tatacagtga atgaatgatg tgcaacattt aatagtcaca aagcatttgc 480
tttcagtaca gataatgaaa tcagtagtgt gagggtttgt tggtttttaa caatgaattg 540
ngctggggca tttt 554
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<210> 10138

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10138

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atgttacagc aagggtgtaa cactccactt gagaaagaag tgatacttct tcccttccaa 120
gagttcccc cccccccgc ccctaccccc ccaagaggtc tggctctgac agcaccctgc 180
ccacacagag tggctggggt ctctgcacgt gccaggcagg gtgagggccg cctgccccgt 240
ggcctctccc cttgggttaa tagccaaggg gagaatgcaa accccagccc aaatggagag 300
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acatttacat acgtttttata taatatacaa agaaaccagc atcccaggca acatgatttc 360  
 cactcccaat gctctcccag actgatgggt ttgtggggga aacaacanaa agaaaagtac 420  
 actgctgagg tctcagcatt taaaaaaaaa nnnaaaaaaaa atctcccctc atttgagcaa 480  
 acacctgatt tcgattttga aaagngaaat ttgnaacaag tcacaccna agaggagaag 540  
 actgtgcnt 549

<210> 10139

<211> 534

<212> DNA

<213> Homo sapiens

<400> 10139

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 aaataattgc ctactttttt gaaacaaact tggtttttac cacagcagtt tcatttttctt 180  
 tttccaaaag tcttaacaca attttgtaaa gtaaatttct aacgccagag agattaagtt 240  
 caatgaccat agtatatgct actgnnttaa agcaaggtta acacacacac acacacacac 300  
 acacacacac aaaatgggac tgaacaaaag tcactactta atactttcta aattgcctct 360  
 tttggaggta cgggtgaaaga aaaacattct agatgtgtct gaaagaaaca aggtcacaca 420  
 cttactaaaa ttcccctttg ctttaagngt agttgaggga agttcaacta atcttaaccc 480  
 tttttgggaa gaaggcaata ctcatcttca tgaattttgg ttacnttgga aacc 534

<210> 10140

<211> 537

<212> DNA

<213> Homo sapiens

<400> 10140

acaaaggact gaagtcaaac cgccaaaaga aaaatgtatt gtaacaacaa atagggtaca 60



actttaagga atgtactttt aaaattacta tgagttttatc aataataacc ttatcatgtta 120  
 agtcttccaa tttttgtaca taaaaatgat ttatcatcaa ccactgaaac tatccattgt 180  
 ggatgtaaat aaaataacca agttcaatgt aagaaagcag cataaaacaa agtaaaactt 240  
 gtgatttgca aatcagcctg atgtaagttt gttgtttgtg ttgttttttt ttgcctttgt 300  
 agttgcagaa ggtgagctct gttttagaag gagtcatttc attccccaat tgaattttta 360  
 ctcathtagc ctaaaatcac ttcaaaagtt taaaatgagg gtagaggaaa taaaagaggaa 420  
 aaaaagtaaa cntataggta agtttatcag atcactaaat gctanccttn gaatatccaa 480  
 cccagccaa tgcntaaggt ctttatgcca tcctggattt ggnntttnta aggggaa 537

<210> 10141

<211> 542

<212> DNA

<213> Homo sapiens

<400> 10141

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 tctgcctgtg gatccaaatc aagcctgggt gtggctgaca ataccagggc acggtttgct 180  
 tcccggccct ccattctctac tgtttggcta cagcttgagt tcactaggca tcggctcccc 240  
 tctcaggcca gccagcaagt tgtagctgc caacaaggac atggtgttgc gggttctgng 300  
 ggtggcactg ccaatgtggg gcagaatcac acagttcttc agggcatga nangggtggt 360  
 ttgtaagcag tggttctggg ctgcncacat ccagtccagc agctgcaatc ttaccactgg 420  
 ccaagggtg gtacaggtcg nctgggtta cgaacgtgc ccctgggaat gacagtgggt 480  
 gacatgggta ccccgaaaa atccttcgnc aagccancnt ttgggggna acaactaccg 540  
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<210> 10142

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10142

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gtgtgttaag tcacttgttt atttctcaag atgtgcacac tcaagtatga agctggccgg 60
gacaactcat ggctcctagg tatgtacagg ccctttgatg gcttgggtta cagacaacct 120
catagctggg gcaccacaca cacgagataa aacaggaagc ctaaaaaccc caagccacac 180
caagaaaaat gagagagggg agggcggggg aacaatgcag catcccgcgg aggggaactta 240
atgcacaagg agggagaaca gaggggtggaa ggcaagccaa ctttcncttc gccncgcaa 300
ctgctgnng ggtgggcaag ggactgagtt caacaagggc ctttaggaaa ctttttggaa 360
tcgggtgaan tctgatnaaa aaaccgggcc acaatcgagg gaacttttgn aaaggcttcc 420
acttggttg aaactcctcc tggaaggttt tnagggttt tgcggcagc ttcgtaaag 480
ggcatgtcgt tgnngcggat gtcctcancg agagaccgga ccagcctccc ttttgggtta 540
ctggnagg 548
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<210> 10143

<211> 311

<212> DNA

<213> Homo sapiens

<400> 10143

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agntagattc tacctctgnc acccaggcgg gagtgcagng gcatgatctc ggctcactgg 60
actccagctt aggcaacaga gccagactgn gtctcaaaaa caggaaagaa aacnaaagaa 120
aatttggact attgccaatt acaaatattt ttagagaaga attcaaaata gtaactgngg 180
atgatggaaa caatagttat gatagaagtc tgatgaaact tcccagttca caaggaaatt 240
taattactta cgtgcagcat ttttaagacag taatcagaat cntgantggg ngnatnatnt 300
tagggcccc n 311
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<210> 10144

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10144

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caggataata accaaagggt ttattaactt ggaaaataaa aattcaataa aacattcaga 60
ttgggaagat aaaaatgaat aattcttcct gaaagcagat cagaaacata gacgaaaaat 120
agaaaagata aaaaatatta gagcatcagc ctgggtgtag gggagggtcc aacattgaaa 180
taataggtgg tccagaaaga aagaatgtaa ataatcaca gaaaatttaa gaaatttccc 240
atgaaggccc agcacaagggt ttaacacccg ggatacaaca ccatcatgac agttcagaac 300
accaagaata aagagatctt aaatgtttcc aggaagggtg gataaaaaaa cctaagtcac 360
atataaagggt acnggaatca gaatggcatc agaaatctca accagcacccg cttgggaagg 420
gctaggggan gggattatit tccacctggc attctatgct cagccccatt ttggtnangg 480
ccnaaatncg gactttttta gtcatgccaa aatctcaaaa tatttacaac ctttttacnt 540
tccaggtctt ttcn 554
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<210> 10145

<211> 551

<212> DNA

<213> Homo sapiens

<400> 10145

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gagagagaga gtctcactct gtcaccaga ctggagtgcg gtggcacgaa cactgctcac 60
tgcagccctg acctcctggg ctcaagccat cttcccttct cagcctccag agtagctgag 120
atcacagtcg catgccacca cacatggcta aatitititit tgggggcggg ggggtagaga 180
cggggatctc accatgttgc ccaggcaggt gaagttgtat tttataatta cctaaaagtt 240
atagtttatt tggtttgatg gggtagctta tttattitita atcttcaatg tagtagaatg 300
actitititg gtgtititgt cagcattata atcttcagtg ttcttaatga acactttcat 360
taagtttaat aatgccttt agcaacaata atatatgcc acaagaatca tgacaaattt 420
ctacccaact cgttgggtaca tttctgattc tggttcaatg aaaatgtctc tcttaaaaat 480
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gncactttg caaaagcttg gcataattcc ttccaagcc gtgtttacac agnantgaac 540  
cgaaagagtn t 551

<210> 10146

<211> 396

<212> DNA

<213> Homo sapiens

<400> 10146

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gctctgcctc ctggattcac gccattctcc tgcctcagcc tcccgagtag ctgggactac 120  
aggcgccac caccacgccc agctagtttt ttgtatttt ttagtagaga cggggtttca 180  
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aaagtgtgg gattacaggc gtgagccact gtgtccggcc aggcctctct tcttaattca 300  
acagtcagtt atctcagagg gtttctctct agtgtctctt cctgtttgaa aggaagtggg 360  
acaactgaat gcttctctca tntttnttn tnnnn 396

<210> 10147

<211> 515

<212> DNA

<213> Homo sapiens

<400> 10147

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taaggattta aaactagaaa aacgcaccaa aagtgtgtcg taaaaaagtt gctccccaat 120  
gagaagtctt ctaccgtcat ggagcttctg tttccacata ctgtccaaga ccaccacagg 180  
gtgcaccgta ccattgggag gtgcttccat attccgcaac aaatgaaact tccatgatga 240  
agatccggaa gaaaagatgt agtgatggaa aaggagccac atattccaac catttaata 300  
actttaattt acatactnac tnacacaggt accagggtt tgaaaataga ttggtcagtc 360

ctaaaaagca nctttggtct ggcttcnctt ttctggccct tccttttttag ccaaggcagg 420  
 ccttccactt tttcantact gggtaagta aggttngtt aanaanttnc ccaacgcttt 480  
 aatctttttt ggccntggat ttttcaggna aaatt 515

<210> 10148

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10148

cttttttttt tttgaaacag cgtctcactc tgtcgcccag actgctggag tgcagtggcg 60  
 cgatctcgac tcaactggcaa cctccacctc ccaggctcaa gcaattctcc tgcctcagcc 120  
 tcccagatag ctgggattac aggcgcatgc cactaccgcc cggctaattt ttttagtaga 180  
 gacgggggtt cgctatgttg gccaggctcc tgacctcaaa tgatctaccc accttggcct 240  
 cccaaagtgc tgggattata ggcatgagcc accgtacctt gccctcaatg caactttcta 300  
 aaaaatgcct actacaaatc tcttaactaa tgactctctt aggtgctgc aatacagaat 360  
 ttcttttttt ttcttttttt tttanagaca gggctctgct ctgtcaccca ggctggagtg 420  
 caatggcaca atcacagctn actggagcct caaactcctg ggctnaggca atcttccacc 480  
 ttagcctcca agtagttggg actaccaagn ggcaccaaca tcctgggcaa tttnaaaatt 540  
 ttgnanaaac cggg 554

<210> 10149

<211> 564

<212> DNA

<213> Homo sapiens

<400> 10149

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 ggaaggctcc gcctggggcc tgtccacagt ggatctgggtg acatatctct gcattaatca 120

cctaagagat gtggctgtct tcttctccct gaaccctgct tacagggaag attgtgacat 180  
 attgctggca tcagcaaaca gacgatgtgt ctctcgtaat tgggccttgc ccacagaaag 240  
 cattttgaca tattgctggg cttattactg aagggtgaagg gtgactcttg cagcctgcac 300  
 cctgcanggg gttggtaacg tattcctggc tgagtaccca ggtgatgtga ctcttctgcc 360  
 tggcccttgt gtcaggggaa agaattgtga catattcctg gcccagaaat caagggtgaag 420  
 gtgacttttc ctgttngctc cctaccacaca ggtaaaaact gnggacatat atcttgggtcc 480  
 actaacagtg caataacgac tntaatgcc acataagcca ntngaaagga actggcagtt 540  
 taactgggat ttgaaaaaan ggta 564

<210> 10150

<211> 551

<212> DNA

<213> Homo sapiens

<400> 10150

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 aacctccgcc tcccgtgttc aaacgattct cctgccacag cctcccagat agctggaatt 120  
 acaggcatgc gccaccacgc ccggctactt tttgtatttt tagtagagat ggggtttcac 180  
 ctgttggcca ggctgggtct caactcctga cctcaagtga tccacccgcc tcaccctccc 240  
 aagggtctgg gattacaggc gtgagccact gtgcctggcc tatttattta ttttattttt 300  
 gagacagcgg gagtatctcc caagctggag tacaatggcg tgatcttggc tcaactgcaac 360  
 ctccacctcc cgggttcaag caagtcttat gcgtcagcct cctgagtagc tgggattata 420  
 ggcatgcgtg accatgcctg gctaactttt ggatttttta gtanagatgg ggtttcacca 480  
 ttttgaccaa actggctcga actccngact caagnactt ctgccttgn ctccaattg 540  
 gtgggataca g 551

<210> 10151

<211> 558

<212> DNA

<213> Homo sapiens

<400> 10151

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gagatggagt ctagctctgt tgtccaggct ggagtgcagt gacgcgatct cggctcactg   60
caacctccac ctcccagggt caagcaattc tcttgactca ccctcccga cagttgggtat  120
tacagggtgcc cgccaccacg cccggctaac gtttgtatct ttagtagaga cgggggtttca  180
ccgtgttggc cagcctggtc tccaactcct gatctcaagt gttccacctg cctcggcctc  240
ccgaagtgtt gggattacag gcatgagcta ctgcacctgg tctaaagggt catttttgta  300
atgtcactat tatggctctg acaataggga ccagagggtca tttcatttta ttattgggtta  360
tctacatttc tctctcagtg tgaaacttgc tgatatttga agaaactggg atgtgaggca  420
gggaccaatc atggagggtg gtctgagacg gaggggggtt ctgggaggca ggactgatgc  480
tggtgctaata gctggggaaa gtcccaggca ggctancang gtggcaccaa gcttcgatgt  540
gaaccgccgn antntgcn                                     558

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<210> 10152

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10152

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aaacagagtc tcaactactc tgtcgcccag gctggagtgc agtggcatga tctcggtcca   60
cagcaacctc cacctcccag gtccaagcaa ttctctgcc tcctactcct cccatgtagc  120
tggtgattaca ggtgtgtacc accatgcctg gctaactttt gtatttttag taaagacggg  180
gtttcaccat gtcagccagg ctagtcttgc actcctggcc tcaagggtac tgcctacctt  240
ggcctcccaa agtgctggga ttacagacat gagccaccgc acccagcctg gttgggagaa  300
tgttctattg attccctagg atgctaggaa gtactcagca aatactaaat gtagcaattc  360
tcaggggtta ggaggagttc aagataaatg agtattgtaa acacagtagt ccaggtaagt  420
taagcccca tgccctcttc aggaggcctg gtctctggac acttacagaa gaaaagtcca  480
ccccctgat acaggccttc catagcttac ttctcaacag actgnagctt caacctgaaa  540

```

caccnttttn catnttacta a

561

<210> 10153

<211> 571

<212> DNA

<213> Homo sapiens

<400> 10153

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gttttttttt tttttttttt tcccagttag aaaacgtttt atggacacgg aacgctccac   60
tgtaacgggc aggcagaaca cactcctttc ccaggctcat caattaaaca gaaaacaggg  120
gagctctcct caccacagcc tggccctgtg ctccccaatg gcccctgcga ggcccctacc  180
atggcctgcc tgggagacac aaactatgac aggaacacac tggactgata cagaatgagg  240
ccagacacac ccatgcctgt gcctcccaag agcgacccca ggacagtggg gcagacagag  300
gtgtctacac tggcagaaat aagggtgga gccacacgtg atgctcggac acaaacggca  360
cgcagctctg cagcctggcc acacaccctt cgcgtatgac tccactcctc agggttcacg  420
gggctgtgta cagagactct ctctgctgac acgatggcca cacgcccttc gngtatgact  480
tcacttcctc agggttacgg gcttgtgtac agagactntt tntgntgacc catgggcata  540
tggnccttgc gtatgactcc attcttangg t                                     571
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<210> 10154

<211> 533

<212> DNA

<213> Homo sapiens

<400> 10154

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gaagtgggtgc aaagtacatt tattttttaca atgaaagctc atctatgaat ctgataaagg   60
ccttccttca actggagaca atttgggatg ttgcaaaaca aggtttggga agcccttcta  120
tggatcggtt ttgtgtccaa gtctgtccct gccaaaagcc atcaaaagtc tccatcacc  180
ctgggctcca gtctgtacc cccagacttg gcagctggga tctctccttc ctggttcata  240
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gttctcatat ccacccctca gcgatggagt tagagttcca ggcccacgtg gtgaacgaga 300  
 ttgtgagtgt caagagggaa tacgtagttt atgatctgaa gacccaagtc ccaccccagc 360  
 aagccggtgc cctgcttcca ggtgacggtg agtcaagtcg cgaggaggcc gacagagggc 420  
 tgctggangc cggttggaat naaggatgca cggncanaag ccangcccca tgcccccgan 480  
 gcccaacttc tttccccccg nccggaaagg cctgactttt ccccttcanc ttg 533

<210> 10155

<211> 559

<212> DNA

<213> Homo sapiens

<400> 10155

acagatagga tcttgctgtt gcctaggctg gaggtcagtg gcacaatcat agctcactgc 60  
 agcttcgaac tcctgggctc aagcaatcct cctgcctcag cctcctgagt agctgagact 120  
 acaggcacgt gtcaccaagc ccagctaagt tttttatitt ttgtagagat gaggtctcac 180  
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 tgtgctttgg atagaatcat tgctttttct agcttgnngc cttttttttt ttaagtatct 360  
 gnataaggca gttggaaaac aagttcaagc tggacactct tgagtccagt cctcatgttt 420  
 tcagcccact gttgcaccca attcgtgtgg gcaagcctgg ggcccatggn atgagggatc 480  
 tncagtaag gaagctgnta tttggccaaa accgcanaaa cttgaaactt aangggatcc 540  
 aaataaatgg cngttgngg 559

<210> 10156

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10156

ccaagactat tatttttatt tccggacaaa aacatctgct tcacacagtg cacggcatca 60  
aatgaagagg aaagaacttg tatcccaaag cctggctttc tgtatcatcc acaaattaag 120  
acagcatctg ctgagcccat gctgagcctg tcacagtcaa caactgggaa accggggcct 180  
ctactgaacc aggggacaag tagccgaagc acttaaacag cttgatactt gttttttggt 240  
acatttgttt atttaaagca caggaaatga ataaaatgcc acctaaaaag tatctgcaat 300  
gaataaatta tttccagtga agcactgcag atccacacac accagtctgc taacctttac 360  
caaggccatg tccgggtggc ttgngcttgt cccagttgac tcttccttga gacctttccc 420  
ttctgngcaa tgaccacagc attagagacc agtcctgcat gcgctggctt cctcgaaggc 480  
atggaaaacc acgtggatga ncagtgggct ggcattgcag aagggttaac aaanggactt 540  
tactggtttc aggggcctg a 561

<210> 10157

<211> 502

<212> DNA

<213> Homo sapiens

<400> 10157

agatggagtc ttgttctgtt gcccaggctg gaatgcagtg tcactatattt ggttcactgc 60  
aacctctgcc tcctgggttc aagcgattct cctgcgtcag cctcccgagt agctgggatt 120  
acagatgcac aacaccacac cgggctaatt ttttgtatatt ttagtagaga cggggtttca 180  
ctatgttggc cagactggtc tcgaactcct gacctcgtga tccaccctcc ttggcctccc 240  
aaagtgctgg gattacaggc gtgagccacc gcgcccggcg gccctgacta tttttaatga 300  
gccccgcgc aacaggctgg tgtgaaatgt gtgttgaggg atgctttgng aagaataagg 360  
natnacagaa agacagtgca ctgatggtgc aatgaaagca acacaggnt tcttaacctg 420  
nccaagaaac ttatggnntt gggggaacaa tcaangnact taaataccct ttaagnggaa 480  
tctcatgggt ttnacaggaa na 502

<210> 10158

<211> 575

<212> DNA

<213> Homo sapiens

<400> 10158

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aaagacagag tctcactctg ttgcccaggc tggagtgagc tggcatgac ttggctcact 60
gtaacctcca cgtcccaggt tcaagcaatt ctctacctc agacccccaa gtaactggga 120
ctacaggcta atttttgtat gtttagtgaa gactgtttcc ccatgttggc caggctggtc 180
tcgatctcct gatcacacgt gatccacca cctcggcctc ccaaagtgtt gggattacaa 240
gtgtgagcca ccatgctcgg cccagagggc acgtttctaa gtcctgaatc tgcagtgtctg 300
gctacaggca accttccctg ccattgacaa gtgttatcaa tctgtttgac ttggctatat 360
gcataaccaa gggccctgac ttcccatctc caacaaggaa ccacttttct taatgcagtt 420
ctggagcaaa tccagatgtt tgtcaaagct tgactgcccg catgctccct gacctatccc 480
ccaaanggtt tntagaacaa acaataagcc atggcaaggt tctggcacgg anccaagcct 540
tggaaaaact agtttggagg taaggcttgn ccang 575

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<210> 10159

<211> 518

<212> DNA

<213> Homo sapiens

<400> 10159

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ctcaatcatc gtttttaatt ggctttataa gctaaagtgc atagtaaaga caaaaaaagg 60
aaatgcatac ataggaaagg gacacttaga aaggacctga gatacctaaa tgtctgttct 120
aaggaacact ggaaggaggg aatgcagatg caggcagcag gcctgggtct ggcttctggc 180
ctgggtttgg agcctgcana agctgctggc atgctagctc taccagggga acagctccaa 240
gagggagtgt tgggatgaag gatcacactt gggataggtg ctgctgttac caaatgtgat 300
tttagctcca ttcagggcc aggggtaacc agcagtgcc ccaaacctgt cancaggtaa 360
agaaacttct accatcccaa agtgcaggtt acaggaaagg ggtcactcct taatgacgac 420
ctgggcctgc tgcataangc ccatcttatg caacatgtgg gctgnccatc tttcccactt 480

```

ttnagggcta tgnacttggg caaggtnaan tggncaac

518

<210> 10160

<211> 474

<212> DNA

<213> Homo sapiens

<400> 10160

caaatcacat atggcttctt tgaccccatc aaataacttt attcacacaa acgtccctta 60  
attacaaag cctcagtcac tcatacacat taggggatcc acagtgttca aggaacttaa 120  
atataatgta tcataccaac ccaagtaaac caagtacaaa aaatattcat ataaagttgt 180  
tcacacgtag gtcctagatt accagcttct gtgcaaaaaa aggaaatgaa gaaaaataga 240  
tttattaact agtattggaa actaactttg tgcctggctt aaaacctccc tnacgctcgt 300  
ctgtcccaca caaatgttta agaagtcact gcaatgtact ccccggctct gatgaaaaga 360  
agccccctgtt acaaaagatt ccagtgtccc tgaagaggct cccttctctc tnggggctct 420  
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<210> 10161

<211> 446

<212> DNA

<213> Homo sapiens

<400> 10161

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gaatggagtt ggggggcgct cagagatctg ggattttctc atttctctc gggacaggcc 180  
aaggccatcc agggcccagg tttggtcttg gtcataaaca aggaggccag tccaagggac 240  
cccggcgcca cctcccacca cccccgggac ctcttctcct cagacatgga gttcaacttt 300  
ccacccccat cagcaaccac gataacaatg acgacgacag ggagatgaga actaattgta 360

accaaaaaaa caaaaacagt ccagtcgcta atgctggcat tgataaggcg gnttccttg 420  
gnccgtatta ttgcctnant nttnan 446

<210> 10162

<211> 564

<212> DNA

<213> Homo sapiens

<400> 10162

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cactgtcctc agacagaaac acacaacaca agggtttagaa acagggtttc aaagacaacc 180  
ctctgggcca ggaatgagga gtcataaaat acttcaatta gccattaatg ctttaaaaag 240  
gcattttttt aaaaagtccc accacaaagg ctcaacttca agtactaatt taatgggtaa 300  
gttgtaatat ttctttgaaa taatattcct atgggccaga aaaaattcac catatttata 360  
actgatttca tgagcaaaca ctttcaattg ntggatgtac ataagtcctt ttgatctaa 420  
tgagaggaga gacctggctt ncaataagaa ttcactagaa atatatttcc gtgggactnt 480  
ttaaacttat taagggcctt gcctccatgg ntttanntta gcttgctggc ctttggnnta 540  
aanggtatcc cttatgaaag gcgg 564

<210> 10163

<211> 373

<212> DNA

<213> Homo sapiens

<400> 10163

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atgaataatt aangccaagg agnggggaaat atgagtaana aaaaaaaaaa aagagggggtt 180

gganaaggga aggcctcctg aggggacatt tcagccaana cctgaatgat ggancaagcc 240  
 acacgggcct gagggcagca gcaggatgga caggaccaa ggtccgtgca aaggccctga 300  
 ggctgaatgg ngtttgagga atgttgaaag gccngtgagg aggggaancc taanaggaat 360  
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<210> 10164

<211> 543

<212> DNA

<213> Homo sapiens

<400> 10164

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 ctgcctcagc ttcctcagta gctggaacta caggtgtgca ccccccacacc cagctaattt 180  
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 gcgcccggcc ttgngttact tttaatgagc caaaagacag taagaaggag caaagcaaaa 360  
 cccaccgaag gctctgtggg cagctggccc tgaaagcaca tcctgnctct tgnTTTTacc 420  
 aactatgtga gcctttgggc aaaataccta acagtctgaa gccttaagtt ccttattaga 480  
 aaaagggaga agatgatctg gatatttctt aagggtaatg gttcttccat ntctgaagg 540  
 agg 543

<210> 10165

<211> 542

<212> DNA

<213> Homo sapiens

<400> 10165

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cittcacttg atcaattcag ctattgatac ttgtgtatgc ttcataaaat tcttgggctg 120  
 tgttttcagc ttcatacagg cgtttatgtt cttctctaaa ctagttattc tagttagcaa 180  
 ttcctctaac cttttatcaa ggttattagc ttccttgcac tgggttagag catgcttggt 240  
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 ctcatctcc atccagtttt ggtcccatc ctggcaagga gttgtaatcc tttggaagat 360  
 aagaggtatt ctgatttttg caattttcac ctttttatg ctggattttc ctcatcttca 420  
 tggatttacc taccttttgt ctttgctggg ggtgacctta ggatgaagtt tttgcatggg 480  
 ccgccttttt ggtgagggtga tgctactgct tttggtnata agttttcctt ctaacagtca 540  
 gn 542

<210> 10166

<211> 538

<212> DNA

<213> Homo sapiens

<400> 10166

gagagagaga gagacaagga tcttgctctg ttgcctggac tggagtgcag tggcatgac 60  
 atggctcact gcaacctcga cttctggggc tcaaggatcc tcccatctca gcctcccaag 120  
 tagccgaggg actacaggca cgtaccacca cgcccagctc ctaaggacat cagctttaag 180  
 tacaatgctc caatttcttc ttttcacaag agtgtatcca tgtattactt atgaaattga 240  
 aagtttaaaa aagctttgag aaatacaaat ctagggggaa tgtcttgagt gagtgggatt 300  
 ctgacgactc aacggattaa atgtcatgag ggctgatccc agctgcctgg aatgggtctg 360  
 ggctgtggaa ttgcaccgac aggtgtgcca gcacagcgt ggccctggcc aaggtgtgga 420  
 acacactgac tcccagcact gntccgaggt gctgggaacc ccaagtgcaa gacattacaa 480  
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<210> 10167

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10167

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gcacagcaag acttgtctgc agacacacag gaggcaaacg gacagcccgt caaccagaga 120
tggagacgaa ggccagcgtg gctctcacag ggcagcgctt ctcagaacct ctggccccc 180
tcgtgccaa gctggcctgt gtcaggcctc gccacgccg ccttatgaca aatagaggcc 240
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accctgcaaa tcccaccca cccnaggca cctncgtcta anggtgtcgg ttactccagg 360
taaggagggt cccaggangg ccgtgttttc cctaaggctg atgaaacttg ctccgacaag 420
ccaggccact gggaggcacc tcaggatgga aaagatgctg gaggctttgc tggctttcag 480
gatgcccgga gcccacggg ggccaaangg gaagaangaa agcgantntt aagacagatt 540
ggtgntggt 549
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<210> 10168

<211> 537

<212> DNA

<213> Homo sapiens

<400> 10168

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caatgtccac atcttcatat ttatttccac agtggttaaca tggaatagac ttagcaacca 60
ttgcagagaa aaaaaaaaaat ctctcattgg tttatgagtt aaatcctgta acaatgaatt 120
tcaaccattc gaagtcttct gctgcttaac atttactgaa tcaaaggctg aagtaaattg 180
actctcatct aggtctcaga aatcacacag ctggcctcgt gatgtattta cgatgggatt 240
taacttctaa tacaaggcaa gtttgacagt tacagccaat gaagtgcacg actctgtaca 300
tggatttctt gacctaacat tcaaaaggac atttcatagt actagtttaa ttctgatctc 360
tctctagaag gcagaaacca catccacac tcctatgcaa tttgttattt tggatttgta 420
aagtaaattga ataagaaggg gtggaggcat aaagaaaatc tagtttctgg ctgggcangg 480
tggttcacgc ttgnaatccc gcncitttggg aggccaaggc ggntggatca cnaggnn 537
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<210> 10169

<211> 542

<212> DNA

<213> Homo sapiens

<400> 10169

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gagacaggtt cttactctgt caccaggtt gaggtgcagt ggatctatct cggctcactg   60
cagccttgac ctcccaggct caggtgatca ttccacctca gcctcctgag tagttgggac  120
tataggcaca tggcaccacg tccagctagt ttttgtatit tttttgtaga gacgaggttt  180
cgccatgttg ccccggctag gcttgaactc ctggcctcaa gcgatccact cgcctcggcc  240
tcccaaagng ctagaattac aggcattgagg tactgagcct ggcttgactt ataattctga  300
tgaaaatgtt caatgtcaac ttaagaatgg gcaagggagc acatgggctt ttggaattct  360
tttttttttt tgagacggag tcttgctctg tcaccaggc tggantgcan tggcgtgac  420
tcggctcact gnaaccttcg ctccgggtt caagcgattc tctgnctaa ccttccaagt  480
actgagaata caggcatgca ccaacacgcc cagctaattt gganttttag ganaaanggg  540
gg                                                                    542

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<210> 10170

<211> 557

<212> DNA

<213> Homo sapiens

<400> 10170

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aaaaacatga gagcaaattg tacatatatc aatctccctt gcttgtcttt aagaaagggc   60
cgttcatagc atttggcaca aacctcttat ttctgttgca ttagcatgat tttaaataag  120
aaggaaaata aacatttgat ttatttcatt ctccctaagt ttctgggcag ggacatgcct  180
tactctttta gaaaccaatt ccaagatgac atctgactgc atttttctgt tgggtccgaac  240
ttctaaacaa acactcataa agtaagttaa aacaatttgg agatgtatga ggaaaaagtc  300

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ttgttctgtt cagttcagac ttgttataaa aaaaaaaaaa aaaangaaaa gaaaaaaaaatg 360  
ctcatttcac atgtccatga tcttcatgga ttttttttaa gcttatttga gtttgattaa 420  
gggacaaaaa agaagaggcg gcaagttttc cctatctctt tggagtgttt cgctcaagga 480  
aattttgctc atcaagggtca gctacatacn cagnggacac atnaaaggca aactgggggg 540  
ctccgaggat acaaagg 557

<210> 10171

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10171

agtcctagat acaattcctt tattatcatt atcatgcccc ctagcacatg aagctgggct 60  
tccacctaga tcagctaagg acaggggtat gtttacaatg agaacaattt ctctatgcgc 120  
attaggttaa gacctcttct ctgtttctag aatactgtga tgactcacat ccatgggcca 180  
gctgcttcca ggaatccatc tggcctcaac aacattgggc tgcctggaat aacggctggc 240  
acttgcacag ggcaggggtat ggggagcagg cctcaggtct ataagcagga ctgggcactg 300  
ctgaaatagg ggaagggggc agccaacatg tagcaggttc tcccaaggca tgtagaagtt 360  
ggtgggaaaa tggggctggg gtgtgtaact tgtccccttc caggaaggga cccaggcacc 420  
tggtctcctg gccaaagatca caggcgatcc aagagtcctc cagggaagaa caagactgna 480  
cagacgcaca gcanaaangc tttcctggct ggncatgaac tgccatggng acacgcttna 540  
ttctagcccc caaggg 556

<210> 10172

<211> 472

<212> DNA

<213> Homo sapiens

<400> 10172

aaaaaacaaa gtgtgcattt tccttactac gtttagtcag gaatatgcgg tcattttatt 60  
 ggttactggg tttctcatal aaacagatat aatatcactt ttaagagaaa tgtacacaag 120  
 gaagtaacca tagtaccact tattagtggg ggcctctggg tacataaatg ngtcctccca 180  
 aatagtcac atacattcaa tgtattgggt agggccaaaa tccctaaacc acctntcaac 240  
 aaaacattac acctttgggt ctttattatg caaaaattac aaattggcaa attcaataag 300  
 aggatgcaat gggatttgag catnacagcc aaattgctta tactaaaaaa ttttaaattc 360  
 ttanaatctt ttttcttaa acctttnct tttccacctt acatnagaaa aatggatgct 420  
 taaaacnaaa cnggaggagc aantaaccaa caaaaaacc cnttcccaa ng 472

<210> 10173

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10173

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 aaattcccaa agnggaatat catccaatgt gagacacatc atagcacggt ccatatgtac 180  
 acggcacaca gagctctgcc tgcgctcatc tgtgaattgc tcattacatg tcaactgataa 240  
 aaaaatctgc aagggaactt ctactcttca gttctcctct tctgatgca ttgtcacata 300  
 tttttaagga actttaggga tatgaagaaa atgcattaaa gtgggtttct gctaagggt 360  
 ctgcatgttt tgctctgac aattacgcac tacatcttga gaaaaacttt tgcaactcat 420  
 ttccagcaaa gatagcagaa aactctangt ttttgccaat taattttttc ctagcctcat 480  
 tggaacccaa gtccaacacc accggttang gacccaatca tggtttttat attgggaagt 540  
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<210> 10174

<211> 568

<212> DNA

<213> Homo sapiens

<400> 10174

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ccaagtagct gggactacag gcgcccgccca ccacgcctgg ctttaattttt tctattttag 180
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tagttcttaa agtcactaat agcattatit tatgcccacg aaccagtaag tcagacccaa 360
gcctgaaata gtgttttctg aaaaatggaa aaggaaatat aagaatttta aaaacaaacc 420
ttgaaatcag tttctcaagt taaaattctg atggatgtca caaatagtaa gggcttcctt 480
actgagctct ggcatctgnt ttggctttta tgcatactgg gatttgggaa gctgctgctc 540
aacattctag cccatttnca gaggggnc 568
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<210> 10175

<211> 541

<212> DNA

<213> Homo sapiens

<400> 10175

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tttcagcacc tgccaccacg ccagctgat ttttgtatit ttagtcaaga tgagattttt 180
gccatgttgg cgggctggt ctigaactcc tgacctcaaa tgatccgcct gcctcagcct 240
cctaaagtgc tgggattata ggcatgagcc accacacctg gcctttttct tctgtttcta 300
actgttcctt tttatttccc tatggagcat ctactgagcc ccagcccag agtagaaaca 360
aacctgctgg ctgctctcaa ggcacttata gtccagtagg ggagacggca ctnaccactc 420
agtcacacaa atgaccgtcg aattgtgacc caccctaagg caattggctt ttctgaggac 480
taaggaggga cnaggagcta aggaggaccc ctttatgccca antaaaacct ctggggaact 540
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t

541

<210> 10176

<211> 545

<212> DNA

<213> Homo sapiens

<400> 10176

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atatgagtta tttgctttat gtaatcagta atctcaagggt ttctcctctt tctctggaaa  180
cacaatttaa atattaacct aatctttaaa ctgcggctgc ttctttctga catttggaaa  240
ctggatcatcc atacaaaaaa aggcaaatat ggatatatta atgaaaaggc agcttctcaa  300
aaatcttaaa gtatgtaact caatgaattg ggaaggaaaa tgataaaagt agcaggaaag  360
tcaagtcttt gtgncacttt ctagggaaaa caatgctgggt catctgcca caacaccttc  420
agtctgagaa cctgctgaag ttgactggca attgccaaaa agtctttggg tttcttcatt  480
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aangc                                         545
    
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<210> 10177

<211> 517

<212> DNA

<213> Homo sapiens

<400> 10177

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caataaatgt atagaaattg ttttattcaa agactaagggt ggaaagggtg agaaattaag   60
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aaaatggaga cgacagtagt tacgacaaat acttgagaaa agcctatgaa attactgact  180
ttggtagtcc agccaaacat ttgcttcagg aaaagcatcc agaaatataa tgatttaggg  240
    
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atatcaaggt atactatata aagcattggt gtatatatta tttcctcttt tcccttggga 300  
 ggtaatatct gaattattat cagactccta atgaggaaac actctgagaa gtgagaagcc 360  
 tgccttgtgt caaantgggt aaaatcagag agacaaaggc gttagggtc gactcaggnc 420  
 ctctgacttg cagggttcta ttgaagtgn caccttgcct gagctttnaa gcttaaggaa 480  
 tgggccnagg aataccctgg ggncattcnc nccggaa 517

<210> 10178

<211> 539

<212> DNA

<213> Homo sapiens

<400> 10178

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 ttcttccttt ataagaagtt gaatttaatt ttgaagtaa ttacttagga agaaatgcag 180  
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 ctccaagaag ttctgtctca tattacttcc tactcctntc cagaataagt cagaaccttg 480  
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<210> 10179

<211> 517

<212> DNA

<213> Homo sapiens

<400> 10179

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 aattgataag ggccagagct gggattcgaa acaagggtg cttatctcta gagccctggc 360  
 ccttgtcccc tcacctttgt ggaggtgggg tttagctgga gctgaagggt agtctgccct 420  
 caggtagaag catgggtggg agagaaccan ggagtanggg tggggtgtna anaccttccc 480  
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<210> 10180

<211> 463

<212> DNA

<213> Homo sapiens

<400> 10180

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 tgttcccaga gacacttgag acggggatca accccatttt taaaatttga gacagggtct 180  
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 tatttttttt tgtggagatg ggttcttgct atgttgccca ggatggcctc gaactcctgg 360  
 cctcaaggga tcctcctgcc ttggcctcca aagtgttagg attataggcg tgagccactg 420  
 nacctggnet naaccccant ttttangnga cttggcttaa aga 463

<210> 10181

<211> 484

<212> DNA

<213> Homo sapiens

<400> 10181

cacagaaccc actcaggatt ctttctggaa acaacctggg ggactttgat gagaggctca	60
agccttctag ctacctcaca ggtcagactc tgggccccag gaacccttg ccctgggcct	120
gccctcaggg aatgattcat aattaagaga aaagccttgt gctttatgtt tcttcctcct	180
cctctaagca ggcggcaggg gaaggtggag gggttggaag gggaatgggg ggaaccgact	240
ggagactggg attttgattg agaggcccca ttatccacac tcttaaaaaa ataaccgaat	300
cttttccttt tttatcttga ccaatctcat ttcacgtcc agaagaggaa gggagggagg	360
gagggagtcc ggggccagga gggacagagg agtcagtatt ctgnattttc aacgctgcat	420
taagcacatn gncacggtaa ccaggcagca acaaagtgcc ancttaacan gntnccaagg	480
gagc	484

<210> 10182

<211> 355

<212> DNA

<213> Homo sapiens

<400> 10182

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ctgaggncag gaattcgaga ccagcctggc caacagggtg anaccccatn tntacttaaa	180
acacaaaaat tagcagggca tggnggngca cacctgttgn cccagctact tgggaggctg	240
aaacnggaga atcttttgaa cccgggaggc ggaggttgca gcgagccaag atcacnccac	300
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<210> 10183

<211> 540

<212> DNA

<213> Homo sapiens



<400> 10183

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 taacagggtgt gtgccaccat gcctggctaa tttttngct tttagtagag atgggggtgc 180  
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 gccaccagg taagcatttt catggggctg gcttctntnc ctttttgag aacacggatc 360  
 aagggtgaa actttggaat ctacagnacc agccataatc aaccctttt tccacaanac 420  
 acacaaggca agcatgcctg gatccttttg gacacanggg ncacatacat gccctaatta 480  
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<210> 10184

<211> 534

<212> DNA

<213> Homo sapiens

<400> 10184

aaataggagc aaggtctcac tatacttccc agactggtct ccaactcctg gcttcaagca 60  
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 cagtttcagt ctattattat tattattatt ataatttaag ttctggaata catgtgcaga 180  
 acgtgcaggc tacataggta tacatgtgct aaggttggtt gctgcacca tcgacctgtc 240  
 atctacattg ggtattttct ctaatgctat cctccccta gtctccatt cctgacagg 300  
 ccctggtgtg tgatgttccc ctccctgtgt ccatgtgttc tcaactgntca attcccactg 360  
 atgagtgaga acatgtggng ttnggtttct ggccttgnga aaagtttgct gagaatgata 420  
 gtttccagct ttatccattn cctggaaang acatgaccgg anccttttta atggcnggat 480  
 aagnattcca tgggatatac gtgccggaat ttcnttaatc ccggctatcc tnga 534

<210> 10185

<211> 528

<212> DNA

<213> Homo sapiens

<400> 10185

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caaacaaata agttttatng gcatntaaaa acaaaattca cccaacattg aaacgtncct 60
taatatttat gttgttggtt tcttggttct tttttactca ctgcagtatg aggaacaaat 120
cacaaacnct tactttggan aaacaganac cgtagngtan attttataaa atcacttttt 180
aaaatctctg tattgggctc ctcaaatacc tanagccagt ctttgcataa aatatacacag 240
ctttatctat aaccttaaaa ttctgcagca gcctaaagat atggataaga tntaccacca 300
cttgctattc tgaaatatnc ctattaccat atccaacctt angatagtat ctaaaaaatt 360
ctttcttcca taggaagtct ctgacaagct gntattcatt tccttgacgt taaaagaatc 420
tggggccaac atttggattt tatccgaaaa aaattnaaaa aaggttaccc accatgggtca 480
ttttaagnac aatnggtttt ccaggnaant gngcccatth ttttnagg 528

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<210> 10186

<211> 503

<212> DNA

<213> Homo sapiens

<400> 10186

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gagggctggg gaaaatctta atggccaaaa cataaaacaa acctgcgtgc acacaaacga 60
gacacaatta cagaaagcat agagcctggc tctccccctg gcctcaaate ccccaggttt 120
gagagtcatt acttctgggg gatggtgact agaaggtggt gggagggagg cttctaggag 180
ctggtgatgg tttggtggtt tcttcacttg ggagcctgct cctgggtgag tgcgggtgaa 240
aagtcatcca gcaagacctt cgctcttctc tgcaggcagg taggttatcc ttgagccatg 300
gggatgacag aaagctccca ctgctcanca ggggtcccgg ctctgcgca ggtctctacg 360
gactctnttc tgtgacctgg gcaatgccca actnttttca atattcaagc tgtggcgtnc 420
ancaaggccg ttatgggaag gaangggcaa aaggatcaaa gtaattggga accantgaca 480
ncgggttaag ggtnatgcc a 503

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<210> 10187

<211> 447

<212> DNA

<213> Homo sapiens

<400> 10187

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atcatcaagt ctiaccattt atttctttat ggggttaaac aagagcagag aggcctntgc   60
cccacaatgc aacaaaacag aaagcagtac atatacagag actntcaccg aaacacagag  120
gcagggttaag agggagggca gagacaactg aatcatagct gggtaaggga ggaagggatg  180
ggggactact aggaaaccag tttggagact cagtcatagg aactagtgc aaaaagtcct  240
actcatgaag cacgngtag aaaatggcat aagaaagctg cccggctctg ctgtctgtga  300
tggagggcag gggcagccgg anaggtggtg gaagattagg gtggtggggt ggatgggggc  360
agtcaaatga ctttgagggtg gantgagggtg ccccttttnc ctgccctggc aaggnccttg  420
gctggntga ccanggtct tctnggn                                     447
    
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<210> 10188

<211> 544

<212> DNA

<213> Homo sapiens

<400> 10188

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gagacagaat tttgctcttg ttgccaggc tggagtgcaa tggcgtgatc ttggctcact   60
gcaacctcca cttccgggt tcaagcaatt ctctgcctc agccttccaa ggagctggga  120
gtataggcat gcaccacat gcccggttaa ttttngttt ttagtagaga cggggtttct  180
ccatgttggc caggctggc tcgagctccc aacctcaggt gatctgcctg ccttggcctc  240
ccaaagtgtt gggattacag gcatgagcca ccgtgccag ctgactttca aacgaaagtt  300
cactttacca tcaaactcaa aatgtagaga tatattcaat cgtgtgttta gtacagcttg  360
taaattccca ttcaaagggt aactgtaaa tagaatgcag gtcataaca agtatttttc  420
    
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aactcttagg atggntgaaa gactgtctca gaaaatctgc aatgaactca naaggacact 480  
 tttttgtcag aaaaattcac cgtaacttt aaaantacat ggctgaggcc ccaaggcatn 540  
 gtna 544

<210> 10189

<211> 497

<212> DNA

<213> Homo sapiens

<400> 10189

gacagggtct cactctgnca cccaggttgg aatgcagtgg tgcaatcctg gtccactgca 60  
 acctccgcct cccaggctca agcgatacac ccacctcagc ctcccagta gctgggacca 120  
 caggcatgcg ccattacacc tggccaattt ttttgnattt ttggtagana tgagttctca 180  
 ccatgttgcc caggctggtc ttgaactcct gagctcaggn gatccaccct tntcancctn 240  
 tgaaagtgtt gggattacag gcatgacca cggccttcgg ccacanana gtttctataa 300  
 aagacgntt cttgccatct cagcacacca tcgcgaagga gtgacgggct ctttcagaga 360  
 catggagggc caggcacctt gtgaccacat gcacaagtga ccagnacaca aaantgggtg 420  
 aagcaactgg gccctgggcg cctgacccaa ggngggggccc atccanggga atgggatttg 480  
 gatggagann cccgngg 497

<210> 10190

<211> 279

<212> DNA

<213> Homo sapiens

<400> 10190

gggagacagg gtctcactct cactcaggct ggagtgcagt gttgcaatct tggctcactg 60  
 caacctctgc ctcttgggtt caagtgttc ttgtgcctca gcctcccag tagctgagat 120  
 tacaggcatg tgccactgtg cctggctaatt ttttgtattt ttagtagaga cgggggtttg 180

ccatgttggg caggctggnc tnaaactcaa actcctgatc ccagntgatc cgnccgcctt 240  
ggcttcccaa atngctggga ttacaggctn tgagccacc 279

<210> 10191

<211> 555

<212> DNA

<213> Homo sapiens

<400> 10191

agattcatct ttttaatgac atcctaaaat tcagaggagg ggccagcggg acctctgggc 60  
tcagcggctg tgaaggaggg acccgcaaca cccgctaagg caggtaatg caagaaggca 120  
ctcgcgaggg ggacttcaag cccctcttct atttcttcat ataaaatcag ggggatgggg 180  
aaagctccaa gggcgaggga agcagagaga gtttctctcc cagcctatgg aataaggaag 240  
aggtgaggaa ggggtgggtg ctgggagcaa gaaactgcca agtccaggac ctgccctcac 300  
acagacacac acagcccgca cctgccctcc ctctaaaatc tgcatccggg gctgtaagga 360  
agccccgtgt tcaagcccc atctcttctc ccttctagct ggtaccaagt tggtaatcac 420  
cactctgggt gatgtagcga acccaggga nggcctggta ccacttttct taatgatent 480  
catgtatcgg acctggatcc agaaaacggg gaaatnngg gatctnaact tgaccnatt 540  
gggggggccc gcctt 555

<210> 10192

<211> 534

<212> DNA

<213> Homo sapiens

<400> 10192

ccaagtcttg cctgtcgcc caggctggag tgcaatggcg caatctcggc tcaactgcaac 60  
ctctgcctcc tgggttcaag caattctcct gcctcaccct cccgagtatc tgggactaca 120  
ggcatgtacc accatgccca gctaattttt gtatttttag tagacatggg gtttcaccat 180

gttggccagg ctggtctcaa actcctgacc ttgggatcca cccaccttgg cctcctaaag 240  
 tgctgggatt acaggcatga gacaccagc ctggccggtg gacccaaatc ttaaagcaca 300  
 tactctactc tagtggttcc taaactttag catgcatcag aatcatttgt agactttgtt 360  
 aaaacacaga gttttggtta cactcctacg gttttttaat caagtaggtc tggggtggag 420  
 gctgacagct agagtttcta acaagttccc aagcccaact attgctggtc canaaacccc 480  
 actttgagaa ccactgggct ancnccaaca gnggtcaata gnttacnggg ttat 534

<210> 10193

<211> 486

<212> DNA

<213> Homo sapiens

<400> 10193

ganacagagt ctagctctat tgccccaggc tggagtgcag ngggacgac tcggctcact 60  
 gcaacctntg cctcctgggt tcaagcgatt ctctgcctt agcctcctga gtagctggga 120  
 ttacaggtgc cgcaccagn gtccggataa tttttggatt tttagtaaag atgggggnatc 180  
 atcaaattgg ncaggctggt ctggaattcc tgacctcagg ngatccacct gcctcggcct 240  
 cccaaagtgc tgggggttaca ggcatgagcc actgcaccta gccagtcagg gcacttttaa 300  
 aagcaaaggt cctattcaaa tgtaagggt ctttatatgc aaagaggtta cacgaagctg 360  
 cagcagntag attaagagcc aacacatcct tntntgcccc tgggacacat gacnttaac 420  
 aaactccaca aacttttcc tttatcacca anaatgaanc ctggtatgct taaaaaccng 480  
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<210> 10194

<211> 517

<212> DNA

<213> Homo sapiens

<400> 10194

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 acctctgcct ccaacgttca agcaattctc gtgcctcagc ctctgagta gctgggatta 120  
 caggcgtgcg tcaccacacc cggctagttt ttgtattttt agtagagatg ggggtttcac 180  
 cacgttggcc aggctgggtct cgaactcctg gcctcaagtg atctgcccgt cttggcctcc 240  
 caaagtgctg ggattacacg cgtgagccac cgtgcccagc ctgcataatg atctttttaa 300  
 aggcatata tactgtcaag ttacacgac acaattcact taactatgat gaattatgaa 360  
 gttaaagtgc aagctcggtta aagtgtcagc attttctatg cgaatgacct atttgagaa 420  
 aagcacacaa tggcaaaaca agtggttaat nacaaaaacc actnacaaga gtgaatatcn 480  
 tntaggaag tttcacntaa aaaaattaac cgnntan 517

<210> 10195

<211> 535

<212> DNA

<213> Homo sapiens

<400> 10195

cctatgaaaa tgtttttaat tttcatcttt tggaaatata tttttcattt ttatttccac 60  
 catacaaaaa tgtgaaatat ctaacaatga tctatctgaa gcgggtggag caaagcagcg 120  
 ccatgagcgt ttgtcgttgc tgtgatctgt ttcaacggag aatgggctgg gacatgttgt 180  
 agatttgcac gatttcacac acacacacac acacacacac acacacacac acacacacag 240  
 acacgtacgc acacacgctg ccgtaccccg agaccgccat ccaaacaac gaacagagac 300  
 tctggaaagt gaacacagcg ccacgcataa gaacagaagt taaccttttt actcgtacat 360  
 ccccatgag aaactcacgt cttaggagaa aggaactcta cataaatatg cccaaaggcc 420  
 agggcatagc gcaagccctc tcatgggtgg gcatgagtgg acatcttnt gaaggaagga 480  
 caagcttgaa agcgcattgg ttcangcagc tntngnggga agcagggang nccaa 535

<210> 10196

<211> 558

<212> DNA

<213> Homo sapiens

<400> 10196

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agagattcag ggtgccatth ttatttccca tggagctgag gacctgagca caggcagcca 60
ccagggtgct tcagaccctc ccgaccttca ggggtgggag tggttttgga gttctgatct 120
tgggtaggca ggcctgtcat attgccagaa atacaggcat agaggcaaga gagagaagaa 180
gaggagaaga agatagcagg aagtaaaggg gacaatgaag agagctaagg gactccttcc 240
ttcttctctc tggcactgtc tccttctctt ttctgcctcc acaccaatct cttggccacc 300
agctggaatg tcaaacagtg gatggtgaca gcaggcaggg aaggggccag ctgcaaggca 360
ggcccaggca ggaggccggc agcaggagga acaggatgac acccttggga agcagttggt 420
gatgggcagg gcacacagat ggccctgctg anggcitttt cgtacgaang gtcttccatc 480
tccaaggcna cacgtgaagt cttntccaac tgggcattgg gcttgactgc cgccccggat 540
cttcaagang gncaaaaaa 558

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<210> 10197

<211> 509

<212> DNA

<213> Homo sapiens

<400> 10197

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gcaacacaag tcaatcttta ttgaaaactg cagtattaat acataacaat tcttgttaca 60
ataaacgtgc ttttgagatt tttaaatctg agctcatctc atcagattgc ataaaaaatt 120
aaaatagtat caattgacac ctaactgaac tggctcagga tggaaattcc attccttggc 180
atggatacgt aagttcaatg cagaggtgag ggatgccttt aacactggaa gacaatgctg 240
acttagctta aaaaaagtac cgagagaacg gtgtaaaaaa cggtatttaa aaatcatttt 300
taaaaaaaca aaaaggaacc gtttcttctt tagttacaat ccatgaggct ctctagggcc 360
tctccgtgtg gccagcacag caaccctgct aggagcacia acggctggcc tgagatctgg 420
cccagctgcc ttgcccactg gtctgcatag ggactcatgg gcacagcctg tgggtangan 480
gganaccctg ncatgnenan cctgggagc 509

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<210> 10198

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10198

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agtagacaca ggggtcttgct atgttgccaa ggctagtctc aaactcctgg cttcaaagga   60
ccttcccatc tcaacctccc aagcaaccag cattacagag atgagcagct gtgcctggct  120
gaattctttt tttttttttt ttttttgaga cagggtctca atccgtctcc caggctggag  180
tgcaatggca caatctcagc tactgcaac ctccacctcc tgggttcaag tgattttcct  240
gcctcagcct ccctagtagt tgggattaca ggcactcgcc accgcaacca gctaactttt  300
gtattttag tagagacagg gtttcaccac gttggccagg ctggtctcaa actcctgacc  360
tcaggatgac tgcctgcctc ggcctcccaa agtgctgaga ttccggcgtg agccactgac  420
ccggcctgaa ttcatttttg gataaaaatc caaaggagtt tataatgcct gcaataaaaa  480
tcattentat nccttttaac atcttantgg ccaaacacat nattnngaatt taaaaataac  540
cccnaaaaaa aatt                                                    554

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<210> 10199

<211> 539

<212> DNA

<213> Homo sapiens

<400> 10199

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gacacagagt cttgctctgt caccagggt ggagtgcagn ggcacaatct cagctcactg   60
caacctccac ctctgggtt caagcgattc tctgcccga gcctcctgag tagctgggat  120
tacagggtgcc tgccaccaca cctggctatt ttttttttaa tgagactgag tttcactctt  180
gttgcccagg ctgggatgca atgacgtgat cttggctcac tgcaacctnt gcctcccggg  240
ttcaagcaat tctcctgcct cagtctcctg agtagctgat attacaggca tgtgccacca  300

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tgcccagcta acttttttgt atttttagta naaacggggt ttctccatgt tggtcaggct 360  
 ggtctcaaac tcctgacctc aggtgatcca cccacctcag cctcccaaag tgctgggatt 420  
 acagacgtga gccactgcgc ctggccctaa tttttggatt tttagtanaa acanggggtc 480  
 actatgttgg ccaagctggc ttnnaacttc tgacctcagg ggaacnggtt actttgccn 539

<210> 10200

<211> 547

<212> DNA

<213> Homo sapiens

<400> 10200

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 ttgcaagtta attcctaaaa gatcagagca gagtgataca caagtttatt aacacagact 180  
 acaacgtcaa tgaagcctcc tggcattgtc ggaaatagaa aacatgtata aaaatcttcg 240  
 aaatgcaggt taaaatgcaa atccaagtga aaggaaaaag cactactgtg aagcctaacg 300  
 gcaattatatt ccttcaaag gaggtttgtg tccagctgga gagaaggcct ggtggacaga 360  
 agacaaagga aggcaaaatt cctaaggag aaattcaaaa aaatgatggg ggtgcttgcc 420  
 ctctgctggg cctctttgca gcgacttcaa cttaatgcat aacgccgtaa ggttgtaaga 480  
 aaagcaactt ttggcttgat cttaaaaaag ctgatttctt ttggcagcat attncggnga 540  
 gaactgn 547

<210> 10201

<211> 552

<212> DNA

<213> Homo sapiens

<400> 10201

agatagagtc tcgctctgtc acccaggctg gagtacagtg gcgcaatctt ggctcactgc 60

agcctccacc tcctgggttc aagcaattct ccctgcctca gcctctcaag tacctgggat: 120  
 tacaggcaca tgctaccatg cctggctaata ttttttattt ttggtagaga cagggtttca 180  
 ccatgttggc caggctggtc tcaaactcct gacctcaggt gatccgcctg actcagcctc 240  
 ccaaagtgtt gggattacag gcgtgagcca ccgcacctgg cctgggtccat ttccttttaa 300  
 ccctgccttt ccaatgagaa cctgggagat gattaaaata ttccatttta tatgtacact 360  
 gcactttaaa aattttttta atttaacttt ttgagacaag ggctccctct gttgcccagg 420  
 ctggagtga gtggcacaag tctttggtca ctgcagcctc aaccttctgg actcaagcaa 480  
 tccttccatc tnaagcttcc aagtagctgg gctactgggc acatggccca aaaccagtta 540  
 attctgnatt tt 552

<210> 10202

<211> 577

<212> DNA

<213> Homo sapiens

<400> 10202

gcctctgcta ggccagtata tttctgtaca aacaagataa tgcaagattt gacagttaag 60  
 gctttgaagc acagcacaca aaatgaaaca atttaaaacc ccttcataaa aatgggaaaa 120  
 attcccaggc caaaggaaaa aaaaagcctt cacagaaaga gactgacact cgactccccc 180  
 cctgctgagg tgtggccagt gagtctgggt gtgagctgcc acctgacagc cagctctgag 240  
 gtatcaaagg agctccgagt gcaagttgaa gacttcagca agccagcccc cggccccccac 300  
 acccgttcat aggcagtcgg aatgcagatc tcggtggcag gtgggtcttt gcacaagtcc 360  
 agagtgataa aacaatcaca gatgactaaa tgccanggac tgggtgnaag caggtactgg 420  
 cttgcagctn gggcacttct gncnttatta gacctggtgg naccatgacg tgaggagaac 480  
 ggagcacagt tccttccgng cttctgccgg gcttggttaag gngngcatgg ttgancctgg 540  
 caagcatttg gattttggag tctcactctt aggccaa 577

<210> 10203

<211> 590

<212> DNA

<213> Homo sapiens

<400> 10203

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ctctttcttt ctctctctcc ttctctctct ctcttttatt tgtttattta tttatttttt 60
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acgtctagag aacatgaaag tggcagagca aaggagcaga aagctagaaa gagctggatt 180
ccctgattca caatggtagc ccggtaccct aaaccagccc tgggttcctt atctctgtat 240
tttctttcac atgacagaga aataaacctt tgtctctgtt attatttgga ttcgttggtt 300
catgcagaaa cattaaatct tgactgaata ccaacaccta atcagaggca gaagccagct 360
accacactc tgcacccaga gtcataagatt cacagagcta ttgccttaat ggatcatcct 420
cacacctagt tcacaagatc aacgacaggc tggcagctta aagaattccc gggggaacaa 480
ggcattggaa aagtcaaggt tcctggggcc acccatccct angggatttg gattctatga 540
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<210> 10204

<211> 570

<212> DNA

<213> Homo sapiens

<400> 10204

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aaactagatt tttattttta ttatatttcc atgtgaagac atcacccaaa tgtcagcgga 60
gcaaaagact ttatgggtcag ataccaaagg cgtacagttg atcccacttt ggaataaatg 120
cccagaaggt aataagcatt atcagtgagt gagagctcta ggcacaaaat aagttctcat 180
tcagaaagtg gacagagata tgaagcagtg aaacatatag ctttaaaaac tggaaatcat 240
tcatgacatt tgttttcaaa gtaaacatta tctgcatttc aagaactgta attttcaaaa 300
gtagaatcag gcctgattaa gtaatatatta tgacttacag ataaaattca aaaataaaaa 360
tgaaaactct tctggccctt gaagagatag aaaactatat tttttccct gnatggccca 420
gagattatca gtattcatcc ctaaggctgc ttaaaaaaag gtattttnaa tcggctttct 480

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ggtctgcnc tttacatagc aaacgggtta tatggcctct tgctgagtga aaggangata 540  
attcctgctn aatgaaagaa ctccatttcc 570

<210> 10205

<211> 469

<212> DNA

<213> Homo sapiens

<400> 10205

acaattaggg tcatttaact atttaattgc tttttgagat tattgctgaa attaggaagg 60  
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attttccaag tataaaactc gtaatattaa aagtacata gcagtatatt cacatgacta 180  
cttaagtcta atgcagaaac aagacagtac agtttttgca gaggccgatg tgacatctgc 240  
atgcaacatg atactattaa gtgtctctac ccacctctgc tacagagtag ctgctatatg 300  
cacacataca caaaaataca caatgaaaag cctacaaaag gtgtaagtc caactaaggg 360  
tcttaaatgg aaaattaaag gnggctccag tangncctt tggaiaaacc cttttccctn 420  
ggcccatggt gnccagccn aaaggaacca agngctcggg gctgggtct 469

<210> 10206

<211> 285

<212> DNA

<213> Homo sapiens

<400> 10206

canggtaagg cttttgaaag atttatngaa ataaattatc ttgcctaaa aatttacctg 60  
tcaccttttt caattacttt tcaacattct aaaaactttc cgttatgtaa aatncattta 120  
aactttgcca ataatingtag ataatacngg attcttccca aanggactac cacaaaacaa 180  
agctttcaaa gagtaaaaaa aaaaaaaaaa aaaangtaat ccaanggggc ataaaactgn 240  
ggtctgtanc ctatgacttc anggttcaaa tccttaangt taanc 285

<210> 10207

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10207

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cctggtgcag ccagatgttc taacttttgg acaaatgagc gtggtcagta atgtacaata 60
actcttgagt ctgttacttt ggcctagcta agcccatctg gccctcgggc atcctgcaag 120
atgacagaca gaagagcaag ggcactatca gaaatggaac aggctgcccc ctactcctcc 180
cagcctctac cagtacacag agacagactg gagatagagc attcgcagcc agttggcatc 240
ttggttcttt tgtcttctga aaataaaaaat aagtgtttgt cttgtctttg ggggtcaaag 300
agaaccgcac taatttatTTT cctcgagggg gcttttctgg aggagaggat cctcaagtcc 360
tgtgccaagg tttcacgctg tttggccaca cgccaggcct ttcttctgga tctggtctac 420
acgtccagag atgatggagg aattgcatca gcatcatatg cncagtgaaa nggtggcttt 480
ttgtccaaaa aaggccattt ccgggcctgg tacatggcct aagggcctgg cggaagtttg 540
aaaagctggc ttcaaanagn 560
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<210> 10208

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10208

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gaaggacagg gttaccgagt ttatttcttg gtgcctccaa gagctcatgg aaaagcagca 60
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tcagcttggc tgtgtggtac atgctgccaa gggtcgggtg ccaagagaga gcagaatgaa 180
gccaggtccc caaggaagtg agggcccaaa atagggagtg tgggtgatga ggggtggagtt 240
caaatccaga tgtcagagct acaatcgccc ccagggtagc ggagctcatg ggcaagggtc 300
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gggccaaggg gctccttccc gaagtcacc aggaagttgg ggttcaactt cagccctcct 360  
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 actgcttggc ccaagccttg tcaacgacct ggtgatgtaa aagcctttcc atccagctga 480  
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 acntttatt 549

<210> 10209

<211> 553

<212> DNA

<213> Homo sapiens

<400> 10209

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 attacctgtt gcgtataaga gaggcaacat agatccaaac agacaaaaca tttttgggg 180  
 atgggtgtat gtatacagct aaagcaaatt caacattagg aacatcaata ttatgtactc 240  
 cagtactata cacagcgtca attaaaggct tcacttcaga ataaggcatg tgaagaggaa 300  
 atccagagaa cctgtagtct cccagctgtt ttagcagttc tgctctgtgg catcttctac 360  
 atcttctcct tgactttttt ctaacagagg caagaagtga cgcanagtag angtaccata 420  
 cctatcccc cgagtcanaat ggcggtgnct ncagtcctatg actgatcttt aacctgctgg 480  
 aggacttgn tactatnggc ctatnggggg ctaagggtcc tnggttctat acattctggc 540  
 tnggaaccgt tnt 553

<210> 10210

<211> 505

<212> DNA

<213> Homo sapiens

<400> 10210

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atacactggt atcaagatgg tatcggtta taacattcct cttagcagcg gnggttgngt 180  
tcccagaggg cagaatatca gtatgatgaa tttctcggca gttatattta gacaaagaag 240  
gagtattatc tggactgttt atataattca angttccctt aacgcttagc tttcggctaa 300  
attctggcaa ctttttcatt ttcattgaaa gtttcctcac agttcgtgga gattttatct 360  
tatctggcaa tgaccaatta attgaactgc ctttttcaca gggctaggat ttggaaaaaa 420  
atgggtccat aattccaatt cagnctatt tgnancancc ngaanccaaa anccggcaaa 480  
ggggattcac atgggactgg cctcc 505

<210> 10211

<211> 540

<212> DNA

<213> Homo sapiens

<400> 10211

gagatggagt ctgctctgt caccaggtt ggagtgcagt ggctgatct cagctcactg 60  
caagctctgc ctccgggtc cagccattc tcctgcctca gcctcccgag cagccgggac 120  
cacaggcgcc cgccaccatg cccaactaat tttttgcatt tttagtaaag acagggtttc 180  
accatgttag ccaggatggt ctgactctc tgacctcatg atccacctac ctgacctcc 240  
caaagtgtg ggattacagg cgtgagccac catgcccagc ataaaattgc taatttttga 300  
cataaggcaa tttctttctt tttttgtttg agatggagtc tcgctcagtc acccaggctg 360  
gagtacagt gtgcgactc agctcactgc aagctctgcc tcccaggttc acgcatgct 420  
cctgcttcag cctccaagta gctgggacca caggcgcccc gcancgggcc cagctatctt 480  
ttttggaatt taggnaaaac ggggcctaac atcttncceg gaagggnnn anttctgacc 540

<210> 10212

<211> 539

<212> DNA



<213> Homo sapiens

<400> 10212

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atTTTTTTTT agacacagtc tcgctctgtg gcccaggctg gaggcagtc gtgcgatccc 60
agctcactgc agcctctgcc tcccagggtc aagcgattct cctgcctcag cctccccagt 120
agctgggatt acagggaccg tgccaccatg cctggctaata tttgtattt ttagtagaga 180
tggggtttta ccatgttggc caggctggtc aagaactcct gatctcaggt tatctgtgtt 240
gcccgtcaca gcagccacta gccacatgtg gctactgggt cctgaaaatg tgggtggcaa 300
aacatacacc caattttgaa tacttaatac aaaaaagagt acaaaatata taatgatgtt 360
aattatatgt tgaaataact tttagaaatt tgtgttaaaa tatatagtga agattaatct 420
cacctTTTTT tttttctttg gtgagacagg gtctactgtc gccaaagctgg antgcaatgg 480
cgtgaacctt gnttactgga accctnaact tacangntta aagggaanct tccccntaa 539

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<210> 10213

<211> 547

<212> DNA

<213> Homo sapiens

<400> 10213

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aagagacagg atctcattct gttgccaga gtggagtgca gtggcatgat cgtagcttac 60
tacaacctca aattcctggg ctcaagtgat ccttctgcct cagccttcca aagtgtctggg 120
attataggca tgaggccact gcgcccagcc tcgttagtca tttatctacc aaatacatgg 180
aaaactcaca gaatcagagg gtcttatcac caaatctatg tttgctttgc aaaaggctcag 240
gtcctgcatt ttcaaaatgt tccttgtgct ctgttatgct ttatatttca tagcacagca 300
acgccccctt cacaacgact ggtgatcatg ttaccaattt ctgtccatgt atctgaatga 360
gggttataaa cttcaactga gtccaaggta cctggagcca aaaaatcatg gctggaagat 420
cgacctccag aaacatacag aagaccattg actgccacaa cacacatgcc tgctctangc 480
actttcattg angcaacttn aaccacttt tntcttttaa aaggaaattt ttctnccggt 540
tggaan 547

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<210> 10214

<211> 542

<212> DNA

<213> Homo sapiens

<400> 10214

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caggaaaaaa ttatttaata gtataacaaa atgcaaaata aagtacccaa gttacaaaac   60
ataaattcct ttggttcatt atcacaccac tatttttacc ttccacatag ctacagacat  120
cacaccctca aagtgaagtc aaactgtccc cctcatactg aagatgtcat gccaaaacca  180
tcacataccc cactgttcag tgaaactgtt ggcaacttac atggaacaga gctgtggggt  240
aggaaaaagg gaaaagggtt gcgttaaaaa aaatggggag actctacaca tgcagaacaa  300
gttagtgagg gggagtgtct tgctgggtca acacgccatg aaccacaccc ctattcgtgc  360
tacatgaggc tgagtccttg ctacaaccac acagaaatac agacaatcaa gtgaacctga  420
gcacccccag ggataacaga agaaaaatac agagaagcag aggagagaaa gaatggcagc  480
aagangcaga tcacagaatc cangggacac ctagtncnaa cctggtttac cnatngggna  540
ag                                                                    542

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<210> 10215

<211> 529

<212> DNA

<213> Homo sapiens

<400> 10215

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ganaaggagt tttgctgttg ttgcctagtc tggagtgcaa tggcacaatc tcagctcact   60
gcaacctccg cctcccgggt tcaagccatt ctctgcctc agcctcccga gtagctggga  120
ttacaggcat gcaccaccag gccagctaa tttttgtatt tttagtagag acggggtttc  180
tccatgttgg tcaggctggt ctccaactcc tgacctcagg tgatctgcct gcctcagcct  240
cccaaagtgc tgggattaca ggcatgagcc accacagcca ggctatTTTT ggaattttct  300

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aaagcacaaa acacataatg aaaatacagc ttcaaatttc cttccacata tattcttgag 360  
 actaattaca aagttaaagt gaagggtgtt tttttgtttc cagagcatct tttttagaga 420  
 gaagtaggta tagatggagt tgctatacat aaagcactga aaagnggctc tttcaggatn 480  
 ggaaacaaca ntttccttta aaataacnt ntgggggccca aaanaaagn 529

<210> 10216

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10216

caattattaa atgtttggca ctttattaat taaataagct ccaaaattaa ttacatacaa 60  
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 cagctctgag gccgaggctg gcgtcctgtg gcagagggcc tgtggattgc catgctcgct 180  
 cccaggggtg gctcaacagg gacacaggtc tactccttcc acatcgggtt tccggaacaa 240  
 caactgaact ctcattcatt accatcccat tcattacat ttttttttac atacacgaaa 300  
 cacaccgcaa tgtatagact aataagccaa gagctttatt gatgcagcag gcactttaca 360  
 atgagcccaa gagtgtccac cttctctggg aagacaggat gtctgtacaa actcttgggt 420  
 tttttccac ttcaaaaaca caagctttcc cgtttaccac agcccttgga tctgnacctg 480  
 gccaaaccat tccttcccca aggcacacag ggacctttgg accaanacca gncngcaac 540  
 ttgnaaaacc ggna 554

<210> 10217

<211> 537

<212> DNA

<213> Homo sapiens

<400> 10217

gagacggagt ctcactngt agcccaagct ggagtacagt ggtgtggctc actgcaacct 60

ctgtctctgg ggctcaagcg attctcatgc ctcagcctcc caagtagctg ggactacagg 120  
 cttngnctac catgtccagc taatatatat atattttttt atttttagtag anacgggggtt 180  
 tcaccatggt gcccgaggng gtctcgaact cctgagctca ggagatcagc ccgactcggc 240  
 ctcccanagt gctgggatta ccagcatgag caaccatgcc cggcctaatt taagtttttt 300  
 ttaatngat gttgaagatg cttcagaaat gactagtcac tctcacatga ctataccact 360  
 gctgcatgag gcataaggta cttccctgn cctgnacacc acaacgcacc acaactgaca 420  
 cgtcgtgggg cccttcacag acacctgtgg atggaatgaa tgaagggcaa ccattacatc 480  
 ccnggacaga accttggaan ctgggcattg tnccaaggcc cggccggaaa aatggct 537

<210> 10218

<211> 544

<212> DNA

<213> Homo sapiens

<400> 10218

gaaacggagt ctcattctgt caccaggt ggagtgcagt ggtgtgatct cggctcactg 60  
 caacctccac ctcccaggt caagcgattc tcctgcctca gcctcccgag tggctgggac 120  
 tacagacatg taccaccaca cctagctaatt gtttgtattt tttagtagat atggtgtttt 180  
 actatgtttg ccaggctggt ctttaactcc cgacggaccc caagtgatct gatcacctcg 240  
 gcctcctaaa gtgctgggat tacagggtg agtcaccgag cccagcctat gtatttttta 300  
 tttttatttt tttgttgag agatgggtg gatgtcttgc tttgttacc aggttgggtct 360  
 tgaatttggt gctttaagt atcctccac cttggcctcc aaagtgctcg ggttacaggc 420  
 gtaagccaac gtgcctggcc tgnatttatt ggaattcctt tttncattct catcttaatg 480  
 cattttccaa atngagaagg acatccttct ggcttacact ttnaaaaatt nccgttttca 540  
 tggn 544

<210> 10219

<211> 512

<212> DNA

<213> Homo sapiens

<400> 10219

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gtggtattaa aacatatatt tatattataa atttccattc tgaaaagcag atcaaaatga 60
cactggacca tccagtcagt tatggagtaa tgggcttcct ccaaagagaa ctgacttggc 120
agaaatttag gttggttaga atgtgattaa catggagtaa acgagatcag gttgtcagta 180
taattttcat aaggcttcta cccactccag ttgtaaggaa tagtactgag ggaactccaa 240
cagaatgtct tagaaggatg cttctcagag acaaagggtc tctaagtta actcttgacc 300
cctcttctcc ttacctaaag cttggggaag aaaataaata ttaattttt aactattcag 360
agctttgggc acattataat aattaaatat tctggagggt aaatttctga cccttggctt 420
ataaattttc taacntacnt tttaaaaagg nntcaatggc ncctttttca gtaggncccc 480
cttgaaattt aaacctnggt ctttcatatt tt 512
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<210> 10220

<211> 520

<212> DNA

<213> Homo sapiens

<400> 10220

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agcaattatg agagcaaata tttattatgt tccagacact aaatcgatgc attacattta 60
gagacactta gttttacaca gtgatcttaa tagttaggta cagtcttaa tcccaattta 120
tatttcagga aaaagaaact gagaaagtat tcatcatgat tagaaaacaa caggcaaggt 180
ttgagctcaa atactctgga cataaaatct tcaactctgaa tacacatatt gctcatattt 240
tcctctcctt gattccttga tgtacctggg gtatcctgag caacacactg acataccctc 300
caagaacctt tagttgatgt tgggtggtgt catgggggtg gttcctatgg actacctagg 360
tagcatggat ggtggctaac aggctttggg cctcttcaca tcagtataa agtgaaacat 420
ggataaatgg gaaggcaagg atgttatacc catactgncg ggcttttagga gggattaggn 480
aactttctct ggaaatntga aaaagaggna angngtnaat 520
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<210> 10221

<211> 552

<212> DNA

<213> Homo sapiens

<400> 10221

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ccaggaaaca gaaaatgtct ttggtctggt attaatatca aaagaattta actttaaaac   60
tgatcccaat aagcatggcc cttacacagt tcatgaccaa tatttagtta tatgaaaatg  120
gttcattctc ttctagaatc taatccagtg cagtcactctg gtgaaagact ggaagtcaga  180
agacttttca aaagcttctc actgaaatgg taatttggtg acacgggata aacagaattt  240
tgcataaata gcagaccttt agtcactgaa taccaccatta aacagtactg ctggaccatg  300
atacttatat ctgggagatg acttagtttt aaatttttta tgcagtttct tttcttgaag  360
gaaaaacttc cagacttcag aattttggaa gctgaacgat gagcaggttt ttcataattt  420
gctgctcaga catttttcct atttctcaga ctttgcagtt cttttcttag gtgctttaga  480
gcacctaaaa tatcagcttg ctgggggggtc attcngggct ttctgagagt ccngaccgga  540
aagtctgggt gg                                     552
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<210> 10222

<211> 286

<212> DNA

<213> Homo sapiens

<400> 10222

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cccaagagcc aagcagactt tatttctgca gcaatctctg ctggtcaggg tgcctgcact   60
cctntacca ctgcccttca tggtgtgtgc agtggccgca gctgtggccc atggccagcc  120
acactgtcaa ggttcagcga tgctgcagtc atagcanaag ttgaagttgg tgggggggtg  180
gggcacaggg ggtggccgct cggggatggg cacgttctcc agctccagca gacgcagntn  240
ggnctccatg gtcagcagnt gntccaggtc cagccngntc tgntcg                    286
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<210> 10223

<211> 534

<212> DNA

<213> Homo sapiens

<400> 10223

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aaagaatgtg ctgcttatat gcaatgggct tattattcct gttgttaatt ggaattggta   60
tacagacatt ttccaatcct tcaggtttca actggcaaat gccagcagac ataccacag   120
agccagagct cctcaggctc ctccacgtcc aacggcgtct cacagtcctg aggatgagga   180
cctgggtgag gggagcacgg gagacacagc catcaaggca tccacctcca ggacagacac   240
cagccaagaa cccctcagg gcaaggcctc tcacaagtcc aactccacgg attccaccgt   300
aagtgtgtc aactggatgc gcatttaca aatctgagtt ttctcaaaga agctgaagct   360
ttccgtgtcc tcagtgttc tggactcca gcgccgtacc actccctgcc agccacacag   420
ggggacccac aggaagcagg ccttncctgt ggcgggcctt gctgctatcc ggcttccttc   480
tngngaancg tcctgaccgg gaaaggntga gccaacant ggatcctggc tnga       534

```

<210> 10224

<211> 488

<212> DNA

<213> Homo sapiens

<400> 10224

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cggagggcag aacaaattca gactttattg tcaggagag gaaaaagggg agggccgtgg   60
gtggggggcc tgggttgcta cattgtcaag cagaaagagt tgatgggaag gggaagacca   120
gtgtaggcca gaccctccc gggtcggcgg ctgaagggtt gacgatacgg aaaccacgga   180
gtcgggggtg ggggagaggt gtcacacccc cgcccagatt gtgcagtga ggtgactggt   240
gggaggggac agccatgagg tctaggaact tgaatcgggg aggtacaga ctcggcgaat   300
cctgcgaagg ggaaggcgg nggcgaggct tctattgctt ttgtctaca gttttgcgga   360
aggcgaggcg gnggtgggct tggactggac accccttgcc cccctcggta ccccttgggc   420

```

natggtgctg gtgaaaagaa tggaaccgga acttganga anaaagccaa nggaaagnct 480  
attgnggn 488

<210> 10225

<211> 471

<212> DNA

<213> Homo sapiens

<400> 10225

aaatcttatt tcagaaaact tcctcttggg gtaggaaagt acacatgaag cagcaaagta 60  
acgaagaaaa acttaaatag ggccttcaga gatccacac actacaaaga ttctgccaag 120  
ccataagata agtgtgaagc ccagtatatg tccagctttt ctctcagga catcttcagt 180  
gtttcttctc ttttaaacac cacatcaggt tctagccaca gacttgtgtt ttgggtgtgc 240  
ctgctttgag ggggtccatgc ccagtgtgtc tgctgggtgac ccaggactca gcagtaatga 300  
ctaacggccg cccttcagga tcacagatgt gcttgggtgtt ggtggcaaag catggcactt 360  
gtgtgcagtg atgagaagca gcacacggca aggtgagcc cttatcagc aggcctccgt 420  
anagcgtgtc tgcgttgnca gctgccaang gctnantgg ntggccgacc c 471

<210> 10226

<211> 530

<212> DNA

<213> Homo sapiens

<400> 10226

cctttttgga cttcttattc tctttctcac actctttctt tttagaact gcacaggaac 60  
caggacttgg aaaaatcata ttctggaaag cagctttgat agtagccaaa gagatgtctt 120  
cccaaaaagc cactaaatgt tgtaaagtta agggaagagg agacttagac ttcatgtgt 180  
tatgcatgga catttcaaaa gtggtctcgg ttttcccatc ctcacatttt tcatgcagag 240  
gtggttcctt aagcatagac aataccttgt tttgttgat gctaccatc ttagatatat 300



ctggtccatg ggggtgcaata ttaaacadat tcagtgcaga tgatatttct aatgaatgtc 360  
tatttttttaa ctttggtttct ttttcctctg taggttgggtg gctattttaaa ctactcctta 420  
taggagcatg ttcttttgaa agtcaggatg aaacttttagg aaagaagaac caagccattg 480  
catcatgtct atgccttcat gccngaggaa ggaagcaaac ccagtntn 530

<210> 10227

<211> 527

<212> DNA

<213> Homo sapiens

<400> 10227

attcaacaaa agccttttat tcattcaaaa attaaccatt gggtttattc cgcagatatt 60  
aaaaaaaaa aaaaaaaaaa gaggggggca aggcttccca tcacagngcc ctttaagttaa 120  
ttcacttgct atccagggat ggcctagcag aggggtgtct gggaacgct gccagaaatg 180  
tggtggccca gggcctntga ggactcacag cccctcctc gcctccccgc tccagcctcc 240  
ctccggacca cccgtccggt ggggttgcag cccccagggtg cgttggcggc ttaccaccac 300  
cagggggcgc gccgcgcttc cttagctccc ttaaaattaa atgctgaaac cgcgctggga 360  
acagggtgac tttccgcctg gcgggtgggc aatggagggt tttccagag acaagcctgc 420  
ctnttccagg aanggatccc aggcattccg accttcccaa cnaaccctt tcgnaaaaac 480  
ccaaggttct ggaaccagg ggcncctgtt taggaacggc ttgtaaa 527

<210> 10228

<211> 533

<212> DNA

<213> Homo sapiens

<400> 10228

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gcaagctctg cctcccaggc tcacgccatt cttctgcctc agcctcccca gtagctggga 120

ctacaggcgc ccgccaccac gcctggctaa ttttttgtat tttctttagt agagacgggg 180  
 tttcaccatg ttagccagca tggctctcaat ctcctgacct cgtgatccgc ctgccttggc 240  
 ctcccaaagt gctgggatta caggcatgag ccatcgtgcc cggcctgaat tcaccttctt 300  
 tatggggaac aatctgaagt aaagttgagc tctacctagt tagggctaaa tggaactgtt 360  
 ccatttgatt tactatatat aaaaactaaa atcanggttc tgcaacttaa ctgggaagtg 420  
 catcaaaaat aagatagggg ctgggattgg gggttacacc tataatccta acacttgttg 480  
 anggccaana tggaaaagtg cctgaaggcc aanaagttna agaaccanct ggg 533

<210> 10229

<211> 535

<212> DNA

<213> Homo sapiens

<400> 10229

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 tcaatcattt tctacttctc ccagggcact cagacaaaat cagtgcagg tatatggaag 180  
 tacagatgta ctgnatcaga ctagtggagg tgaaaagggtt tctgcagtat aattaaccag 240  
 ttaatatgca gcatgaaagg gaaaagtgga cttactttg gcacctgcaa acgtaaaaag 300  
 tgggagtaaa gagagaagga aatatttact agtgagtact ttacggtgag gcaaaaagta 360  
 gtatccgttc cttttacca agacactgnc cactgnccac tggccacagg ngactcaa 420  
 caaaccaga accaccacc cttcattctt ctcttcatct tattcagaac aantattatg 480  
 ctantancca tgactaagtc cctggggaaa ctnttcaaaa gaattggctt tnggt 535

<210> 10230

<211> 257

<212> DNA

<213> Homo sapiens

<400> 10230

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aagacagagt ctcgctccgt taccaggct ggagtgcagt ggtgccatct cggctcactg 60
caacctccgc ctcccagggt caagtgattc tcagcctcct gagtagctgg gcctacaggc 120
gtgtgccacc atgtccggct aatTTTTgta cttgtagtag agatgcggtt tcaccacata 180
ggccaggctg gtcttganc tctgacctca ngtgatctgc ctgccttngc ctcccaangt 240
gctgggatta caggcnn 257
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<210> 10231

<211> 522

<212> DNA

<213> Homo sapiens

<400> 10231

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aatccaaaca ccaacttgaa caagagactt tcagttttaa aacattttaa gngggaaacc 60
ctgcctgtca atgcatcatt attgcccttc ttgattgctg ncttggtaga tgattcactg 120
cccctcccta naagaggact atgtgtcatc tgccctgccc atgacctcag ccttgggccac 180
atgacttgng gtaccagtct ntacagaaga aggatgcctc cttatatgca aactcagggtg 240
tggccatgtg atctgcactg gccaatgaaa tgtgggcaca agtgacacct gntatttcca 300
agcataagct tanagcctat gaatggtttg ccaggtttgc ctttcctcct tcacccttcc 360
tgggtatagg acagaagaca ggaaggagca gaactatngc agacccagc tgacacacag 420
nacaagcaag caataagcct tgctgntgca ccctgggggt ttgctttaca gnntaaccta 480
gtttaaaaga ctgggaccgt ctttacatgg gatncccaa ct 522
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<210> 10232

<211> 538

<212> DNA

<213> Homo sapiens

<400> 10232

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 cagaacaatg gccaccaggg tttaggcatg ctctcctccc acctggaggc tcccactgac 180  
 atctgaattc ttctttccac aggttgcctt ggattcagtg acctttcttt ggagattttg 240  
 aggaattttc tgctgacctg acttcttctt cttcttcttg ttcttcttct ttactttctc 300  
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 ctagatcttt attttttata agggatgat gaagtttctc atatgcatct tcaaacttct 420  
 cctctgcctg ctggctctat tttcaacctc ctgatatgga agagaagacc cncnaaattg 480  
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<210> 10233

<211> 536

<212> DNA

<213> Homo sapiens

<400> 10233

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 ttacaggcat gcgccaccac atccagctaa ttttgtattt ttagtagaga cagggtttct 180  
 ccatgttggt caggctagtc tcgaactgct gaccttaggt gatccgcctg cctcagcctc 240  
 ccagagtgct gggattacag gcgtgagcca ccgtgcctgg caggaccggt ggtttttaat 300  
 cttcgagtct caatgcctgt ggagaatttg acgaaagcta tgggtatcta cccaaattaa 360  
 catccacgta cacaaaaatt tgggtgtacaa tgctgggagt agcggggagg gggagtagca 420  
 cagattccca ggctttgggg atgggggtga agatttatga acncaggttg gtttnaatcc 480  
 aaccagaatc ctaaggtttt ttcccatggt tgaggggggt ttaatggggg aatgna 536

<210> 10234

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10234

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gcatgccctc aggcctgggg cgtttattag tgcaggccaa agggctcttg ggatttcttt 60
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atttctgcaa ctccaatgca aaatgatagt ccatgtgttc tggcatatcc cataccggta 180
ccaggagacc acacttctca cagggcactt ggctctcagc agctagaaga cttggatttg 240
gggttgcttt ctgagtcacc tccagcacag atttggaagc tgaagaggcg tgcattgcttt 300
ggctgttggt ggccaaatcc atctctgcag gagttgcttt agaggattct tctagcttcg 360
acaccccttc acaaacaggg acacaccctg gatactctgt tggtaaagag ttttgtaatg 420
ctttacagtt ggaccatggg ttttggtggg gggaagaaac tgaagaatta ttaaactggt 480
tctgntttaa aaaccaacct ttctgnntta aanaaggctt aagttcctgg ctttgactgg 540
gttgnaan 548

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<210> 10235

<211> 530

<212> DNA

<213> Homo sapiens

<400> 10235

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gccctctgag aaataattgt ttaattgtta ttatatTTTT tttccaagac agtcttcac 60
tgtcacccan actggagtgc agtggcgcaa tcttgccctca ctacaacctc tgcctcctgg 120
gctcaagcga ttttcatgcc tcancctccc aagatgctag gattacaagt gtgtgccacc 180
acgccctgct cctntgagaa ataaatgagt aaaatgcacc ccctgtgagt gagatgatgc 240
atctgacttg caggaataaa ccaagtgaca tctggagatc actcatggaa gctggcctgg 300
aacagggttg tgatttagcg agggaaagcc cagtaacctg tgggtgttcc tgtcttgctt 360
ctcccatagt gacttctgga aattcagggc ctccttggtc acatcaatct cccgcttgat 420
ggcattgatg tgctgggtgg nctcgctggc ctttttncct cggtcattta agaagggatt 480
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<210> 10236

<211> 511

<212> DNA

<213> Homo sapiens

<400> 10236

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gtttccactg gtggaatgtc gtactaaaac atcagaggct cataaaataa ttacatagtt 180
aataaagttt taagaaaatt attaactata ggcaacattt tttcatgacc ttctaagaat 240
caaggtggtt canagcatct gacctactgc ttaatcaagc tctcctatat aattaaaggt 300
tactaggtgg ctttgactaa aattatgaaa agggacggaa atgtcttgtg gagacacagt 360
atgaatgata gagcaagact gcttcacgaa aatgtaaatg atcaagttat tttttcccaa 420
ggtttaggaa tccctgaagg gtctgaactt ntaaatgcta acntgnccag gccccattta 480
ccntccgggn cccaaggcnt tcctancata t. 511
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<210> 10237

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10237

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acccccgtgg gccaccctag acaccttggc cagatctgga cactcagggc tgagattcaa 120
ctaggaggca gaccacggaa gcaagtttgg aggggacagt ccctgacaga ggctagagca 180
tcatccaagt ggaggagatg agacagaggg aaggagagg gaggcctaag gatttcccca 240
gagggggagg tgcatgactg ggcagggaaa gcagcctgct cgcctggcgg ctgccaccat 300
ctctctcacc ggtgggccct cagaccttgc ccatttgctt aggagacaaa tgactggcca 360
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cagacacacc cccacacaca tttccagggt agacagaagg taaaaaaca aggtggttgc 420  
tcccagcact gcctggncctg ggagctccaa ctatcagagt ccagtgaaca agccattatn 480  
ggcaagnttg gnccgtaaag gtggctggtg gtgnngaata cttgggtggg taaccaatga 540  
aaanccgn 548

<210> 10238

<211> 472

<212> DNA

<213> Homo sapiens

<400> 10238

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tcgcccagcc catccgctgc ccagggcagc tgacgagcag aaacacactc tgcagtggcc 120  
cttgtccgtg ccggggccct cgcccgcagc accgcacgtt cttttagga gcagaacccg 180  
aaactcagag cacagcttgc cctgataact gtcttccag ctggcagccc tctagaagat 240  
gtgggaaatg acacattcct gtccagacac aagccacagt cccccctc ccgagggcgt 300  
ccacggcctg agggaccggt ctccattcag cagagccgca gcgctcaggt cctctcggca 360  
accacgatac acggcccacg tggcctgcc catgcccccg ctgccacgcc ccctgntgcc 420  
acgcatgccc cccgnttgcc angcatgccc gggaacaacc agnagcnngg cn 472

<210> 10239

<211> 536

<212> DNA

<213> Homo sapiens

<400> 10239

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aaacagattg tggggctcta gactccggac agcaccaaaa attcaagttg catatgaagt 180

cctaatactt acagttgatt tccattcagt attcggtatt ttgctcacct gagaatagat 240  
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 aaatcagaaa tgacagtcca tggctctatg gtttttaatg aatagtttgn gtagattttc 360  
 ccatgaaaca cccctgatct tagttgggtg atttatagac ctatgatgtt ggtgggtgatc 420  
 agctaagcaa actagccaaa cngaagtaat ttcaaattaa ggccttttac tttgggctat 480  
 tactcattat tgggatggng ggtnaagggg aaaatcccaa tttntggccc tnacca 536

<210> 10240

<211> 550

<212> DNA

<213> Homo sapiens

<400> 10240

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 tgtacattgt ggggaattta gacagggcat gtccaggatg acttgctact tctcctcaaa 180  
 cttttagacc tctcctagga gactcactca gatgcctggc gattgctctt ggctgtcagt 240  
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 gggctccttc acagcctgat gactggcttc tccagaatga gtgtcccaaa aagagcaagc 360  
 cagatggaag ctgtatcacc ttttcttatt ctagcctcag aagtcccata gcaacacgtt 420  
 tcctggacac tattcttttag aaagtgagtc accaanggca tattcaangg ggaaaaggaa 480  
 ttaagaatct ancctttggg ggaaaaaggg ttaanaaatt ggccaagaag ttngggcctt 540  
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<210> 10241

<211> 469

<212> DNA

<213> Homo sapiens



<400> 10241

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atcctcctgt gtaaaccacc cgagtagctg ggagtacagg tgtgcaccac cacgcctggg 120  
ctttgtagca tgtttaaagg aacctagggtg atttagtcaa aagagaacac tgcataaacc 180  
aaggcctcag gtgcttcttg ctgccttcat ttccacagag gagaacacag ggatttagag 240  
gagatggaaa cattttctag gcagttattg aataacggat ctttggagga gttcgtggag 300  
tagtgtaacc agaaagtctt taaaattaaa cccttctaata cgtttgtaag tgtanatggg 360  
gggacttgga aatctccggg gcctaatacat gctcgcaaaa ggagtacat taatagcttt 420  
ggagaagggg gcttncnttt cntttccagg ttaagtcaac cgtacnnnn 469

<210> 10242

<211> 519

<212> DNA

<213> Homo sapiens

<400> 10242

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ccgccccac ccatacccc agtgtgcaat ggctagctgc tggcctcctc catctgggtcc 120  
ctccagcctc acagcctcct cctgaagccc ttctcttcca ggctccagaa gagcaggaga 180  
caaacacacc cactgaggc ccagctttaa taaagtgcct gatacagagc caggggacag 240  
aaccagggtg atacagctcc cgacagccat ccagagacga cagagggtcg agggagaccc 300  
tcggaagccc ccagtgactc cagacaaagg ggcaagcccc aaaggcgcct ncaacagttg 360  
gaaaacctcc ctgctagagg gcanaaaagg aggcctggcc ctttaagagc ccagctaata 420  
gcaactggct naagggtta aaaaacnagc tttaggttt ggncccgttt cnttaaaagn 480  
ccccaacctt gaaggagttt ggccaaaaaa nccctaaag 519

<210> 10243

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10243

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catttgaggg aggagattat ttacagttt tggaaaagaa taagaacaat tgtatcagga 120
aacaatgat tatgacagaa actcgcaccc gacagctgca gtgaatccac gaggacacag 180
accatgctgg tggccacagc agggccacag gtgaatccac aaggaaacac agaccatgct 240
ggcagccacg gcagggccac agggcacggt ctccatgtgt taatgtttta tgtcagcatt 300
ttcatatgga cagaaatcac gaagaaatcc tgcaaaaatg gcatcaatat gaacaaaccc 360
ttgttataaa aagcaaaata ttgataggaa caatatcttn cagcgtgtgc gtttcacatt 420
tangctttac tggatgaaac taagtcaaaa ttagaagcac tgggctatct tccaccgaca 480
tatattttac tggatataac cttcaagggt tttcttaacc ataggcttaa aaggattctt 540
tttcccaat gngaccngac ccc 563

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<210> 10244

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10244

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cagtgtgatt ccaagcaggc tcatggacta gtgcttacca taaccagggt gcaccagcaa 120
tctgggatat ggtctccac agaagcactg catacagaga aggtgcattt atttattcag 180
tagacagcaa gatttcccag ggagaggaaa accgccctgc cccacctcta ccctggcttc 240
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tcacgtcacc ctgtcgcca ccttgaccaa taggtcaagg gagacttctg ccagctcgct 360
tctgctctgc tgatggcctc atcctgccac tgtggctttt caggtcttc ctctcttgc 420
cctggcggac gtggggcccc actctggctt tcttcttgn accangccct tgcaatggat 480
tcttctgct tgtaggaaaa accngcttct tggangagcc tttnttaaaa caaacctggg 540

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tgggccaaaa ctaanggtgc nct

563

<210> 10245

<211> 513

<212> DNA

<213> Homo sapiens

<400> 10245

aaaggataac atagatttat gtttatttgc attttatgtt tccttatggt tcatatgagt 60  
 ttattggaaa attagcaaca tacacatcat tttggggaat ggaaagtgag gcagagtaag 120  
 ccagaacatt cactgtaaca ttataagcaa gtagaataaa ttgataatac cttcaccagt 180  
 aatgcacttt ccctagtgga aataaattat ttgtataaat agcctcttga tgtttgtgtg 240  
 ttatttagtt atacaaatca catttttctt ttttacatat ggcactttaa tgtagtact 300  
 gaaaatgttt tttctgacat ttttccagta attgtcattt acatcaaata tgcagctaga 360  
 gctaatagaa aaacagttaa aacaatttgt tagnaatgggt agatatttat aaggaaacat 420  
 ttatnaaaga tcttctgtaa gacagcttaa acttgaaaat cntatcaggc cttaaaagca 480  
 ntcaagnggt tttaccancc aaaggttnnga agc 513

<210> 10246

<211> 559

<212> DNA

<213> Homo sapiens

<400> 10246

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 ttccaaaaca gcaaaataga ttcttcccat ccaacccctt ttcctcttgt agagtagggt 180  
 gtggctcgtg gggcttcgtc tctctgcagg cacagaaact ggcagacctg gtcctcctg 240  
 agcgggccct gctcaaggga atgggtgccag attttgaaca caggtaaaca ggctccttca 300

taacaacact gtgcatttct gtgtcatttt gtttattgct cactgagttg ttgccacctc 360  
agctcttggt ggaaaacagt ggggtgtccag aaattgctga cacaagaaga tggattgcct 420  
atggtccgtt agggacacag ggcagcccca gccagatccc actggtccat gcagggcatc 480  
gcagtagaaa ctnaacgtnc cacttngtaa caggctncaa gacaccaatt ccggcancat 540  
gggaaagaan taaaccttn 559

<210> 10247

<211> 569

<212> DNA

<213> Homo sapiens

<400> 10247

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caacctccgc ctcctgggtt caagtattc tcctggctca gcctcctgag gagctggcat 120  
tccaggtatg tgccaccaca ccagctagt ttttgtattt ttagtagaga tggagtttca 180  
ccatgttggg caggctggtc ttgaactcct aacctcaggt gatctgcctg cctcggcctc 240  
ccaaagtgtt gggattacag gtgtgagcca cagcgtcaa tctttccttc tttcaagctg 300  
caaataaatt tatggaaaat gtgaacactc atcttctaata gcttccagaa aaatgaaatt 360  
gagtaaaatg gaagtgatgg cataattctt ctttcagggc tatggagctc ttgaagaatt 420  
ttactggtaa taaagatcac cagcagcatg gacaccaga agagaattgc aaagaagtaa 480  
gtgggaaaga agatgtcaac ataggcncgt atgactacng gggaaaatgn cgtctttaa 540  
caatggcaat tggagcntta antggccct 569

<210> 10248

<211> 532

<212> DNA

<213> Homo sapiens

<400> 10248

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cacatacatc agaaagaatt tggcaataag ttaacaccag caatgtctgg aggttgggtt 120  
attcgatfff ttttgtttcc cttttcttta ctctatccag aagcaggggc tataattgtc 180  
acgggaccct tgggatgtcg atttgccagc cagaaacctc tgtggcaggc agcgccttct 240  
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ttggctcaca ctactggcct cgatctcaca cctgccaaagg gggagccagg cacggagtgg 360  
caaagagtgt atgagcgaat gagcatgggg tccagccact gtgcacagcc acgcatgcta 420  
gctgctgtgg caaggcagac agcttcaggc accagcacia gtgccagctt catgcaaggc 480  
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<210> 10249

<211> 539

<212> DNA

<213> Homo sapiens

<400> 10249

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caagctccac ctcccagggt catgccattc tcctgcctca gcctcccag tagctgggct 120  
acaggcccag caccacaccc agctaatttt tttgtatttt tagtagagac ggggtttcat 180  
cgtgttagcc aggatggcct tgatctctg acctcatgat ccacccgcct cggcctccca 240  
aagtgtgag attacaggcg tgagccaccg cgtccggcca tgatttactc tttttttgt 300  
aatTTTTcaa actaccatat aataaacatg tctttcttta ctttttttg agacaagggt 360  
ttgctctgat gactgggctg gagtgcagt gggcgtgagc acagctcact gcagtcttga 420  
cctcctgggc cttgatcgcc tgggtcttga ctttctgggc cgacctgag ccctctgggc 480  
ttaacaatcc cctgcttaac ctttgagtac tggaccataa cggngtacca tgttggtaa 539

<210> 10250

<211> 555

<212> DNA

<213> Homo sapiens

<400> 10250

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ggtaggggtca tttgctagta gaaaagaaag ctgggattcc ccatttactt tggagactga 120
ggagaaagaa ctgctttccc cactcgtgtc tgggcaaagg gtgtgccag atgttgcaa 180
aggaaccaga caaatcaac agccagcagt tttctgttcc aaacagttag ctctctaca 240
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ggcctcatgt gtatctggtg gnctgcanag cccaaagcag anagctatga tgaataaaat 480
attttaatgn ttctaaaaat aactccttta tatccangga tncctcagta nggcctatt 540
atcctaaagc tcttg 555

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<210> 10251

<211> 570

<212> DNA

<213> Homo sapiens

<400> 10251

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gagacagagt ctactctgt caccaggct ggagtgcagt ggtgcaatct tggctcactg 60
caacctccac ctctgggtt caagcaattc tcttcctcag cctcccaagc agctgggatt 120
acaggcacgc accaccagc ccagctaatt tgtgtatitt tagtagagat ggggtttcat 180
catcttgccc aggctagtct tgaactcctg acctcaagt atccacctgc ctgacctcc 240
ccagcgtgct gagattacag gcgtgagcca ccacgcctgg ccaagttggc tttcttttac 300
acaacatgat gcctagtgga ttcacccatg tttctgtgtg catccgcagt tcattccttt 360
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cctgagggac atttgagttt tttccctta agctttttgn aaattcaagc accctttcat 480
aatitggctt catctttctt caagggaatc nctttttttt tctcaaaagg atcngaaca 540

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atagnattn aanccttcct ggaancgggc

570

<210> 10252

<211> 566

<212> DNA

<213> Homo sapiens

<400> 10252

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ctggcctctg tgaaggcttt cacaatgccc tgggtcacct caccagagaa catgcagctc	180
cgaatactgg ggctcccacc agcctgggag acccaggaga gcagggtcg gggctgactc	240
atctgtgtcc ccagcttctg ccagcacagg gcctggccct caggagacct cacaggatgt	300
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tgaggccact gggagacaga ttacacaga aagtcacacc ggggtgaag ggcttttgga	480
ggctcaaacg actgtgggaa cttggtattg ggagcgcaan ccaaccttg gggacaagg	540
aagnttttng gccaaaaacc cntaat	566

<210> 10253

<211> 570

<212> DNA

<213> Homo sapiens

<400> 10253

gagatggagt ctactctgt cgcctaggct ggagtgcaat ggcgtgatct cagctcacca	60
caacctccac ctctgggtt caagcgagtc tcctgcctca gcctcccag tagctgggat	120
tacaggccac aaccacgcct ggctaatttt tgtatttttt agtagagatg ggcttttgcc	180
atgttgacca ggctggtctt gaactcctga cctcaggatga cccgcctgcc tcagcctccc	240

aaagtgctgg gattacaggt gtaagccacc gcactcagcc atgcctgctg tttctcaaaa 300  
ccaagacctg ggggaagtgg agaaagatgg atgttttgga aatgaatggg ctcaagacca 360  
acaagagtga ttgcaggtct cagatagtgc ctctcccacc ctagtcccga cctcctgagg 420  
aacccttcag gacatggcct gcaaaagact aggggtgagca gggtatggca ccaagcaccc 480  
attggnccag ttggtgccac gcattcccgt gactgggaag agacaacgta nactggactt 540  
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<210> 10254

<211> 447

<212> DNA

<213> Homo sapiens

<400> 10254

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caacctctgc ctctgggct caagtgattc tctgcctca gcctnccgag cagnccggac 120  
tacaggaata tgccaccaca cccagctaatt ttttatattt ttagtagaga cagggtttca 180  
ccatgttgat caggctggtc ttgaactcct gacctcaggt gatccacctg ccttggcctn 240  
ccaaagtgct gggaatacag acgtgagcca ctgcgcctgg cccctcattc ttgaaagacg 300  
gattttctgg gtacacaatt ctaggctatc actatattct cccaggactt tgaagatatt 360  
atttactatc tttctggctt ccactgntgc ttttaatcaa ctacttattn tcttctttcc 420  
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<210> 10255

<211> 562

<212> DNA

<213> Homo sapiens

<400> 10255

cttctctttt ttgtcgccca ggctgagtg aatgggtgcaa tcacggctta ctgcagactc 60



gacctcctgg gctcagcctc ctgaatagct gaggttacag gtgtgcacca ccacgcccag 120  
 ctaattatatt gtactttttt gtagaggcag ggtttacta tgttgcccag gctgggtctca 180  
 aactcccggg ctcaagcaat ctgtccacct tggccttcca aagtgtctggg attacaggct 240  
 tgagccaccg cccagcccc ttcgtcttct atatttagaa acagtgttct tggaagcaga 300  
 cagatgtctt gaggcctgag ctctgttita tggcaagcaa cacagccaac catgcacagg 360  
 gaggtcatgt ctggattaga atggccgacc cattctaata ctctaaacga cgcattttca 420  
 aaagctttga cactggatct taagaaaata agtaaactcc ttggtacaaa agcncittaag 480  
 aaaattaatt acattaaaca cagttcagga agcaccgtgt gatctggcca tgccaggcag 540  
 gcaaaggggn tttcaggggg gc 562

<210> 10256

<211> 545

<212> DNA

<213> Homo sapiens

<400> 10256

agagacaagg tctcgtctg ttgcccaggc cagaggactg tggcaccatc accactaaat 60  
 gcagcctcga cctcctgggc tcacgttate ctcccacctc agcctcctga gtagctggac 120  
 tacagggtgca caccaccaca cccagctaag tttttatatt ttttagagaca gggctcttgct 180  
 atgttgccca ggctgggtctc aaactcctgg tctcaagcaa tcctcccgcc ttggccttcc 240  
 aaagtgttg gattacaggc tgnntttaac gtgtattatc ttattactag tatatattac 300  
 ttgttgcccc gtctgcccac aaaagacacc actgaagtgt atatatgttg caagttcctc 360  
 tccagtgacc ctntaccaa ctccacagag tcagctacta gtaacagcat ggngtatact 420  
 tctagaactt tccacaagcn cacacaaccg ngtaaataatg aaggttccca gaccaacctg 480  
 cccaccgggn ttttnaaaaa aaaaaaagng ggaatttncc aaaggcctgg tttgaacggt 540  
 tcccc 545

<210> 10257

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10257

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agataaatct gttcagataa gtccttatg aatccttcag atcgatgttc ttgaggaaaa 60
cagtcaagct aaacagcaat gatgactttt atggtaaagg atgagctgat cactagctaa 120
gctacttagt caccatcctg ggagatgagc tcacaggcac caaggctttg cttcctgtgg 180
cctgctagtt acagtgaacc agtccatgg attgacaagg gtacacagga tgacagcaga 240
gcaaaggagt ttgccaagta tttgttctgt cattaagtat tcaaaagaac atatattttt 300
cttcatggaa cataactttc taagaatgaa atttggggac ttgaatgatt caagggtcaaa 360
tattaaacat tagctccttc accaatacct gncattgnca ttagaaagga aggcctcttg 420
gttacgtac tggngattca caagggtcct ttgtcggcca agaaggcccc tttgnggctt 480
ggctttaact ggcaatggaa gcctaaactt ttgcccttag gcatctangg ctttccangg 540
ttggaagttg caacccaatg gtg 563

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<210> 10258

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10258

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gaaacatgag ctcacttggg gctctctggc ctctttattc ccatctcctt aggctgaccc 60
tgacaagtgc cagggccagg cttggacca gcaagtcaact gagtcagcct gccctgggaa 120
ccaggcaggg gagggagctt acggacgggc taggctcagg agagtaagag agagcagatg 180
aagggcagaa gtccgtggcc gcagaggcag ctgagcatga gggatggagc gtgctgctgt 240
cctgcaggtg ccgttagccc tgttttgac ttggtggattg atctgctcag gcgcacaggg 300
agatggcaca gcaggacccg ccgcccagcc tcgctgaggg catgctccc cctcacctcc 360
agaggctgtt gggcggaagc cgaaaagctg cagcagttgg ggccagcgtg ggactggang 420
cccaggtgaa tcttgtgggg caaggacgg agcttaagct gtcccggccc gggnccttcc 480

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canccaaagg ncctaaaacc ttagccttta atccttgggg ggtttgcttn tccctgaanc 540  
ctggggtttt ctga 554

<210> 10259

<211> 575

<212> DNA

<213> Homo sapiens

<400> 10259

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gcacagcagt gagaggagct gaggccaagg gaggcagtca cacaccctag ctctgcaaga 120  
cctccaagat ggcccggagg atggcagcag ctgccaccgc cccggggtct ggctgctcca 180  
gccgtgctga gctgatataa ctggctcttc cggctccagc ttccatattc ttggtggcct 240  
cggctgcagc ttcggcactc ttgactgctt tggtcaggac ttgtaacaga tcagctcctg 300  
ggctcttcca ggcttggagc tcctgccccg ctgccacag agaaccacag atagtctgt 360  
cccctggagc agccttgcca tacttctgca tggcttccag gcccggcatc catggcagca 420  
gaccaggctg ggaagctggt cttggccttc agggcttgtg caaccccagt caggaaacang 480  
ccataaacgc cccaaatgaa ccttccatct tttcaagagc ngaccgacaa cttggaaaac 540  
aacttgcaag gcttgcaang ggggtgggcc tcctn 575

<210> 10260

<211> 550

<212> DNA

<213> Homo sapiens

<400> 10260

acaattctca tattttattt tgtaaagca tgataaaaaa ttaacgtcat cattcagatc 60  
cattatttgg aatgaagaat ttagtatttc ctgactgcct aatttggcac tttgaggaat 120  
ttcctctgca cgctgagccc caaaatgcac tattttctag accaaaaatg aaaacgtgcg 180

tatatacaag tgagctgaaa agttacaaca caagatgatac attttgggtga aaaataatcc 240  
 ccccaaataa gcagcatgtc atgtccttag aatatgttac actagaaagc tagtaaaaaat 300  
 tcaggctaag gaggcaattt agagttcaag ttttatcaca ttcagcaaa gtttttagcct 360  
 tcccttaaaa acagacacct tcaaagtga atcttgccag aagggttgat ttttaattat 420  
 gngtatatac aaacttctct attttaacat tcaacatatt caggattaan tctagaaagg 480  
 agctatagct gattattaaa ccaaagtgtt aggaccgaag gaaattgggc ccccaattca 540  
 tngannccn 550

<210> 10261

<211> 476

<212> DNA

<213> Homo sapiens

<400> 10261

attttaatat tttttattaa gggctataaa aaatacccag aaagataaat aaatgngatg 60  
 caatgatatac tggcctaata tgaanaactt tctttcactg nattgnttc cttcacaatg 120  
 gccttcaaat cacaggaggc agtgattcca tgccatttcc tcttctttta ttacacgcta 180  
 caggatttct gaatcagtat ccccgccctc agtcttctct ttataaatca aagtcatttt 240  
 caatccaccg tttaaaggga gcgtattttt ttcttttcca cgaanaggac tctttgnttc 300  
 actatggagg gagaaaaaaa aattgnggca gaaaattatt aagtatcatc gccattttta 360  
 taaaaaatca ttcagacca taagccctac ctttctctta atttactatt cctggatatg 420  
 aaaaatggag ctgatttggc aactcagttc ctccatncca ggagccaggg cagatn 476

<210> 10262

<211> 495

<212> DNA

<213> Homo sapiens

<400> 10262

ctgagacgga gtctcgctct gttgcccagg ctggagtgca gtggcgggat cttggctcac 60  
 tgcaagctcc gcctcctggg ttcatgccat tctcctgcct cagcctcccg agtagctggg 120  
 actacaggcg cctaccacca cgcccggcta attttttgta ctttagtact agagacgggg 180  
 tttcacggtg ttagccagga tgctctcgat ctcccgacct tgtgatttgc ccgccccggc 240  
 ctcccaaagt gctgggatta cagggtgtgag ccacggcgcc cggctggtgg ttttcatata 300  
 ttacaatgt tgtgcaacca ccacccatt atctaattcc agaacatagc ccgtcacccc 360  
 aaaaaggaac cttgcatcca tcatcagtca ctctctattt cccctacccc acttncctgg 420  
 caatcactaa atcacttttt ggtcatatgc cattgnttaa taatggacat ttcatatataa 480  
 tnatacacia ngggg 495

<210> 10263

<211> 473

<212> DNA

<213> Homo sapiens

<400> 10263

gccaaaacaa actttattgc nccaaaaagg aaaacaaaaa aaacaaaaaa acttcattta 60  
 tatacagtca gatntaaaga catntntttg actcctgngc atatatttcc tcaactcaag 120  
 attagggcat aaaagtcagg ctgctatgcc anacatgctn tgccctatgg cagggccaaag 180  
 gagaggattg tcacttgaaa gngggaacnc ttaaatggat gacagacaac actggaccca 240  
 cagaccaaga gcattcttnt aagccctgga gtagctcgag gaatggaaga gggaaattgg 300  
 aagcagggtc ccttttcgat ctcatgtga agagaccag cctnttcaag ggtatccaag 360  
 ataaacttcg ttccccaag ccaccaatc cctgnccagt cctttgnttt ctgccttcn 420  
 aataggacat tctcctttgg ggccaagccc ccttgnaca aaatcctcca ngg 473

<210> 10264

<211> 497

<212> DNA

<213> Homo sapiens

<400> 10264

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caggttttta tttttttatt tcttatattt tttaagacgg agtttcactc ttgttgccca 60
ggtgcagtgc aatggcatga tctcgactca ctgcaacctc cacctcccag gttcaaggga 120
ttctcctgtc tcagcctccc aagcagctgg gatcacaggc atgcaccagc acaccagcc 180
aattttgtat ttttagtaga gacagggttc ctccatgctg gtcaggctag tctcgaactc 240
ccgacctcag gtgatacacc cgcctcggcc tctcaaagtg ctgggattac aggtgtgagc 300
caccatgcct ggccccctggg gacacttttt tcagaggcca gatgtcaact tccatctcca 360
catgcctcaa gtttacacat cattgcatct cagcacagag ccccatcatg taagggntac 420
tttgggttat tctggccctg tgagaagaaa ctattggcag cnaaagccat actggccttt 480
ggcaactttt cccaagt 497
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<210> 10265

<211> 489

<212> DNA

<213> Homo sapiens

<400> 10265

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gagacagagt ctigctctgt caccaggt ggagtacagt ggcatgatct caactcacca 60
caacctctgc ctcttggttc tcctaaatcg ctgaagcggt tctcctgctt cagtctcccg 120
agtagctggg gttacaggca caagccacca cgcctggcta gttttttgta ttttagtag 180
agttgggggt tcacatggt ggccaggctg gtctcaaact cctgacctca agtgatccgc 240
ccacctcggc tccccaaagt gctgggatta caggcgagag ccaccacacc tggcataaaa 300
tacattcttt aaattcatat tatctgcttc ttttacttc ttttaatgtg gctcctggaa 360
aatctaaaat ttgatttttag atctatggct ccattatagc attcctattg ggcagtgtctg 420
gtcttccttt ccatgagaac ccttagctg ggaaaagttt ttctggacta attttttttn 480
aaattttna 489
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<210> 10266

<211> 491

<212> DNA

<213> Homo sapiens

<400> 10266

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aaagaagccc aaacacattt tcttgctgta tttatgttga attcccatc tacaatgagc   60
agtcacgaag atggtcttct tcagggcaac atggtcacag gactggggca atccagggga  120
ctgagagggg gcgtgaggat gggaggtggg gctacctcct gctgtttcac attagagaca  180
aactgtaaca cagtccatgg gcctgcaacc gtcccctttt attatctggc ataacgcgtg  240
atgtagtgtt ccactttatt ctggaagtcc tccttgtcct gcaaattgat tctgttagct  300
tcaatattca gtggatcatc aaaattcaaa aatcagtaaa caaagagttt aatcccaaaa  360
cgacatcctt taatgntctc atgggagccc aaccagtgcc cgcaattgna tggctctctca  420
gtaactcaga catatttccc tggctttggg aatgttgggg tgccanactt tggtcaggcn  480
tttacttttg g                                     491

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<210> 10267

<211> 495

<212> DNA

<213> Homo sapiens

<400> 10267

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gagacggagt ttcactcttg tcacccaggc tgaagtgcaa tggcatgac tcagctcact   60
gcaacctctg cctcctgggt tccagcgatt ctctgcctc agcctccaga gtagctggga  120
ttgcaggcac ctgccaccac gcctgggttaa tttttgtatt tttagtagag acgggggttc  180
accacgttgg ccaggctggg cttgaactcc tgacctcagg tgatctgccc accccagcct  240
cccaaagtgc tgggattaca ggcgtgagcc actgcaccca gccaaaacgt ttttataaag  300
aggtttttaa aagatgggta tgtgtatatt atgtgtatit tataattaaa aagttggggg  360
aaacatttta aaatagtac cataccaat tgttggttaag gctgggggca accggaattc  420
ataccactgn taatagaaat gaaaaaccgg ncaactactt nggaacagtt tggcaagttc  480

```

ntttctttct ttnnn

495

<210> 10268

<211> 431

<212> DNA

<213> Homo sapiens

<400> 10268

ggatacatca aaggtcttta ttagcatagg aacaacacac ggtgtgcatc tgtgtgttcc 60  
ccaaatgcac acaaacctg tctctctcaa gaatcactga tgtatttcat cgtagagttg 120  
agaatttcta ggccatgaag ctttctcagt tgagcagcaa atctgggctc agctgtgcac 180  
agcttcccca gagcaatgcc tgcgttcacc tgcacggccg tcttctgtgt gtcactgcct 240  
gcaagcttta acaagacctg caaaaggtcc gtctttagca gggaagacgc aacgttgggc 300  
acctccatgc agttaccaag gcagagggca gcgttgccca ccagaacctc atcctccgag 360  
ctgagcagct tcatcataac gctcaacttt ttatccagtc ttantacttn ttnccgagct 420  
tnangnanac c 431

<210> 10269

<211> 499

<212> DNA

<213> Homo sapiens

<400> 10269

gagtctcgct ctgttgccca ggctgaagtg cagtggcgcg atctgggctc actgcaagat 60  
ctgcctcccg ggtttacgcc attcttctgc ctcagcctcc caagtagctg ggactacagg 120  
tgcccgcgcg tacgaccggc taattttttg ttattttttt tagtagaggc ggggtttcac 180  
cgtgttagcc aggatagtct ccatctcctg acctcgtgat ccgcccgcct cggcctccca 240  
aagtgtctggg attacaggcg tgagccactg cgcctggcct aatttttact tcgtctggct 300  
tgttcactac tttggcccaa cagctggcct aaccgcgcatc tcgcctgaca cactagaatg 360



acacagtgga atttttggat ggtaggttta tgtggcttca aaaacaggaa gtttctactc 420  
taggtcctaa ctagaaggat tncnttagaa acataaaatg caaattnagc aatctataa 480  
aagtnggtaa aaaaagtcc 499

<210> 10270

<211> 473

<212> DNA

<213> Homo sapiens

<400> 10270

ctttccatt tggaacaagt gcccatcaaa ggcttaggag atataaaaga tgtacaagaa 60  
caactccaag atccctttta agagtctttc atctttctgt aaaaactaaa ccaagataca 120  
taacatatga gtgtcacata tcgcatgcta attcagaagc aagctatatg aagcaatagg 180  
aaacacagag ccgtcagagc gggaaagccc tggaggcacg agtcagcgat gacaccacag 240  
ggtattcaag gagcaccaat ggcttcagg tggcagaaac aatggaggaa ccagcctgag 300  
tcaaggagga ctactaggt aagcttgga aatagggctg aagacgtgga ctgagcagtc 360  
gatggaaggc tcggaagtca gacatggntc acctgcgaca ggggcctnaa caagagaccg 420  
gtntnaaggc actggtttta ggccntnggt ttaaaacccc ggttgccttn aac 473

<210> 10271

<211> 445

<212> DNA

<213> Homo sapiens

<400> 10271

cacagtccta cacataattt atggtattca gaacatcact ttataaactg ttgccaaatt 60  
accacttaaa cactaatatc caaatacaga atttagaaaa ttattttaaa ttttaactct 120  
accatcccc cgagctctcg gctatgaatt tagtctggga agagggtcc gtaataggcc 180  
actgaggtcc tctgtccac cacatcatcc tccccgaaa actagctgcc cgactgctct 240

accagacttg ggctagaatt tggcttcacg gtggcaatgg gaccacctgg gccctacagt 300  
gtggcaaaat caacttgccc acaaaccoca tcccagggtgc tgggatgcta acacactgaa 360  
gctgaaagac cacacttggg tttgccacag atcaagctgn atntgactag acaggctggt 420  
ctntacccta tttinctgnaa aangc 445

<210> 10272

<211> 493

<212> DNA

<213> Homo sapiens

<400> 10272

ggctttggct ntagagcatt tattgnaaac aaaattgagg taaaagaagc tgacccanaa 60  
cccacgcccg tccaggctgg ggaagtctnt actngcccca caccaggccc cgagcaccgc 120  
gggcccnaag cagccccan aggacanacg ggccctgcgc actgaggtag ctgcatntta 180  
agccccatg agtacaactg cccagggtcg cccaattccc anaggggagg aggagagaga 240  
ggcaggcagg gggagccccg gcttnaggng gggcacaccc cacaccctta acaaacctnc 300  
cagcctttng ggctgggcac ttntgcctg gncaccacgc cagccatggg gcaacggggt 360  
ggccaccaaa agcgggcctt cttgggtcca agncacttgt tgttcaagca atccttgggn 420  
acccttggg aagcaagta anccagacgt tttgaaggta nttggggtcn ggataaccgn 480  
ggccctaattg ttc 493

<210> 10273

<211> 429

<212> DNA

<213> Homo sapiens

<400> 10273

cttggtacat gattttatag gaagcacatt tgtgttcaag tgaaggcaga ggcgtccacc 60  
ccaagtcacc agagcgcagg tgcagagagg aaaagctgtc agctagtgcc agcctccaag 120

ggccagcgct acccttcaac agctggaggc accactgtgc gaggctttcc acaccggcct 180  
 ccctcaggaa caagacatcc tcaccaggca ggggtgaggt atgggctcca ggactggctt 240  
 cagcaggcac caggctgggg caccagctgg ggcctgggta cgcccagaag gtcacacaga 300  
 cggttgcgct gctctctcac cactgcaagc tctgcgtccc acgcagtgtc actgagcaca 360  
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 gaccccttg 429

<210> 10274

<211> 490

<212> DNA

<213> Homo sapiens

<400> 10274

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 agctctgcct cccggatica tgccattctc ctgccgcagc ctcccaagta gctgggacta 120  
 caggcgcccc ccaccacgcc tggctaattt tttttttgta ttttagtag agacaggttt 180  
 tcaccgtgtt agccaggatg gtctcgatac cctgacttcc tgatccgccc gtcttggaca 240  
 tgttactttt atgggcagaa aacagcacta caaagtgtt tcaggaaagt ctggctgtga 300  
 agctggcagg aaaggagaga gtggctgggt gaagaaaccg ggttgaacaa tgttttgntt 360  
 ttttcggatg ggaggtatct gaacatgact aaatnccgat ggacagaatt gatngaaang 420  
 ganaattgcc aaaagagcnn aaggcatttt ggaaaagaag gaggaggacc canggtccta 480  
 aggggaaggt 490

<210> 10275

<211> 520

<212> DNA

<213> Homo sapiens

<400> 10275

ctcagcagaa aatgatacag tttatagaaa acctccccgc ccctcccaca ccccaattaa 60  
 aaactacaaa aaaatctccc ctcttccct acgatgtcat ggtagtctga ctctccagt 120  
 ggactgcag ctctggagt gccagctcac cacagcacc tccacttcac ctgggggaga 180  
 ggagggatgc tgggtggttaa ggaggttaaa accattagtt ccagtaatgc cagttcccaa 240  
 acatgcactt ccttcccttc cccaagggtc tgggaccaag gagaaaggga ccgaaatgag 300  
 tccagccatg aggagcaact cgaggagaga aaatatagcc caaggagggtt agaagagttc 360  
 caatatacct cctcccttcc cccaccttaa aaaagaaaaa aaggcagttt aaggnattta 420  
 ttacccccaa aatnggttcc ccttaaggct tgaaaaaagg accaagatgc cagcnttgag 480  
 ggagtntctga aaactcanag ctnatctatc cttgagcctc 520

<210> 10276

<211> 475

<212> DNA

<213> Homo sapiens

<400> 10276

aatcagggtt tgactacttt ggaggacagg ctttagggag aaacctgttg tgcttgtttt 60  
 tttttttttt tttccagggg tggcgggggg ggttggcagt tggcatttct cttatgcctg 120  
 ctccagctct atccanagac gtggcatcat agagacatcc cgatctcctc tgtggagggtc 180  
 atcggactgt acggaanatg gggatgggat agaagaaaat ggactggcaa ccagctctgc 240  
 agggaatac aggcatacac tcacaagaaa caccgtgctt tatcacccat aacaaaaaga 300  
 aaacgaaatg tcaatactct gccctagcga tatctgtgcg aggcaaaaaa agaaaaaagc 360  
 aagcaagcaa accagcaagg gctttggcgt ttgggaaaaa ttatttaaca ncanttgntt 420  
 gcacctttgg aanaccctg gggnttccaa acccggccaa tcntgttggg naggg 475

<210> 10277

<211> 543

<212> DNA

<213> Homo sapiens

<400> 10277

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agcatgcaat tttttattgg tttctaaatc tatttgtaca cttaatatgc tagtattaat 60
ttcacaaaca gtataaagaa tgtactccaa tgatattacg cggcaactac tcacctgaaa 120
aagaaaacat tgtctctgaa ataattccta attatacaat tttgcaaata agcactataa 180
atattaaaaat gttaagactt cagtgtataa tgtcaataac atcctgcctt tttaaaaatt 240
gcttaaaaca tttgttaaag atcatgcaaa ataaacactg tattaaaatg ctagattaca 300
ctcaaacatc aaggcaatga aacacaaaag agcaactatt tagcacaatg actggcccag 360
taaataactt aatcagcata ttaataaaaa cccactgagt gataaacatc gaaaatgtaa 420
cactgaatct agataatagc gcatntggcg atctaccatc taccgnccta actggacttg 480
ggggnaaccc nccggaatca ttctacataa atgagctntg tnaaacgata ccatattcat 540
tgn 543

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<210> 10278

<211> 519

<212> DNA

<213> Homo sapiens

<400> 10278

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agtgggggaa ggggtgagagc tcagcactca ctgctttatt atcacagtag gtgacaaagg 60
ccgcagggag aggggggaaag gtccagagct gtggagaaag aaggggctcc ctgtctccag 120
ggtttgttta aggttttctc catggcctag ggcccagcca cttccctcac tggcctcaaa 180
gccctggagt tgagccctct aggagctcaa gggcaggcag gagatgggcc agagaggggg 240
aggatgtgtt ctttaggtac agaatccctg accacggggt ccagtcctg tgggccaacc 300
accaggaagc tgtgcatgcc cacagcccga ggcccctggt aatcgagag gtaattatcc 360
ccaacatggg ctgccactac tggttccata tgaacaagcc ccaaggcctt ctggaaaatg 420
ccggggtncc gcttgggcca accacaacct nngangtcaa cnccaaatca antggtcacc 480
ccagnccaag gccttcaaga tgcctttaac cgtcggcaa 519

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<210> 10279

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10279

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ggagatggag tttcactctt gttgcccagg ctggagtgca atggcatgat ctcgctcact   60
gcaacctccg cctcccaggt tcaagtgatt ctctgcctc agcctcccga gtagctggga  120
ttacaggcgt gcaccaccac acccagctaa tttttgtatt ttagtagag acagcgtttc  180
accgtgttgg ccagcctggt ctcgaaactcg agacctcagg tgatccccct gcctcggcct  240
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aacgaacact gaaggctttc cacactcatt acacctataa gggttttttc cagngggaat  480
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<210> 10280

<211> 545

<212> DNA

<213> Homo sapiens

<400> 10280

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ggagtccca gcgccccgcg gctgacggcc agatctgtcc tgaggggtcg tgggagccca  180
gcgcctgcct tgagggaat gaacactgaa aacaggattt gggagcagta ttggattgac  240
agcagagaag ggactgtttg taagggcagt ttctcactga agctgctacc attttccttt  300
gtaaagaagt catccacctc ctcccagcgg tgcccatttt caagacgctg cccgagcctc  360

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ttaaaacagc ttcttgaaag ggtttttcca caacgggttc tggaatgttc tgcttcagct 420  
 ctggaggatg ctctaaatta gttcaccatg atgaagttag atttgcagtg agctataact 480  
 ccgtcacagg gtcattgctg ccttccgttt gatggtacct gcnagctgca ttctcaggat 540  
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<210> 10281

<211> 529

<212> DNA

<213> Homo sapiens

<400> 10281

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 tttagtagag acaaggtttc actgngttag ccaggatggt tttgatctcc tgacctcgtg 180  
 atccacctgc cttggcctcc caaagtgtg ggattacagg cgtgagccac catgcccgga 240  
 ctcaaggttt gaattttcaa cataacttaa gaaaccctca tcctttgggg ggatgaccgt 300  
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 gggcaaagtt ctcctttctaa ttanaatgna agggacctga naactctatt catgnctaaa 420  
 ttgcaagggc cataaagggg ccaactcatt atanggggnc aataaagaat ctggtngata 480  
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<210> 10282

<211> 512

<212> DNA

<213> Homo sapiens

<400> 10282

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aagatttagg ttgaagttat cattctctat gaatactccc atgtgcatgg ttcattttatt 180  
 acagtgcgtg aattactctt tttttaaggt tgtttaattt tctttttttt tattatactt 240  
 taagtttttag ggtacatgta cacaacgtgc aggtttgtta catatgtata catgtgccat 300  
 gttggtgtgc tgcacccatt aactcgtcat ttaacattag gtatatctct taatgctatc 360  
 cctccccctt cccccaccc cacaacaggc ccagtggtg gatattcccc ttcctgngtc 420  
 catgtgttct catcgnitcaa tttccaccta tgagtgagaa catgcngngg ttgggtttct 480  
 ggccctgggt cagnttgccc anaatgangg tt 512

<210> 10283

<211> 558

<212> DNA

<213> Homo sapiens

<400> 10283

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 ggtgggcaca ataccatctt gaacgccac aaaaaggttt ggttttgttg ccaaagggca 180  
 ggtggctcca ggcagggtg atggtggcag ggtggggtga ggacaggaca agagatctgg 240  
 gtgtggaagg atggccgggt ttctgcagca gcaggaggaa agggtgggag cacacaggca 300  
 cagaacactg tgagcaggac tgccaggcca gtgtcacaag cgctaccatc tgggtgtaga 360  
 cagacctgag ctgacaaagc tgggggagca aggccaacgg cttaaacac aagctcaggg 420  
 gcttgggggtt tatcccgagg gcacagggca nccatgtagg gtggagttag catgagttaa 480  
 gcctgggctg ggtgtgtana ctggacaaaa gtgggtangg cangcagtga ccantttgtg 540  
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<210> 10284

<211> 556

<212> DNA

<213> Homo sapiens



<400> 10284

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tatctttgtt ttatctgcat tcctgccttt catgaaagtc cctcttgatt gtgctgaggc	120
tgtggctcag cgaagacact gaataaatac gatagccact gttgcttggt gcttgtccaa	180
gtcttcttgg ctctctgctgc aagaggggga tatggagaag gtgggccagg gtgtgtggac	240
ccgggcagaa tctggggaag aagcctgcca ttctgtcttc tttccacac caccgaaccc	300
actgcccttc ccacccccac agccctttta tgaaatcaga caacgtggta ggtggaaaac	360
agcaggcctt ttcctctggg ttttcaacca gaagtatat tccacaagtt ttaactggtt	420
actngaagt ccaagcggcc agaattnga aaatgtcact ggaacactgn agccgnggac	480
cttaaagacc gtaggccttt taaaatttgg taaaaatttt gggagggctn ttacaangng	540
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<210> 10285

<211> 551

<212> DNA

<213> Homo sapiens

<400> 10285

aaatacttgc attttatctt aggccaaagc ccctccactc tgaactaaat gccatgacag	60
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gaggagtggg cgacaggagg gggaaggatc acacacacaa acctaagagt agagcaatgc	180
agaatgcctg tggcactcgg ctctaccag ctctggctct cagtggagat gaagaatggc	240
agcaggagga cagaatgcct cattgtctga aggagagcgt gttgtttctc atctccatcc	300
ccagagccct ctctttcagg caggcagaaa caaagccctt gcacccccact gcactgcgca	360
acacagcaga gacgctgggt gcggaagccc tggaggcagg gagctgctac caaaggagaa	420
gaaaaggatt ccaaaaagaa aggagcccac tctaaccctg cggaagagat ggnccatgt	480
ctgctttata acccgaagaa gacagtacca gccccggaca ggctttccaa aataaangnc	540
cctgggcttg t	551

<210> 10286

<211> 539

<212> DNA

<213> Homo sapiens

<400> 10286

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gagacagggt cttgctctgt tgcccaggct ggagtccagt cacaagctct tggctcacgg 60
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cagatgggtg ccaccacat gccgcctgg ctagtttttt ttttttttt tttganacgg 180
agtctcgctc tgtccccag gctggagtgc agnggtgtga tctcggtca ctgtaagctc 240
cacctcccaa gttcacgcca ttcttctgcc tcagcctccc gagtagctgg gactacaggc 300
acctgccacc atgccagct aatttttttt gnatttttag tagagacggg gtttcaccgt 360
gttagccggg atggtctcaa tctcctgacc tcgagatccg cccgcctngg cctccaaaag 420
tgctgggatt acaggcgtga gccaccggcc agnccctgnc ggctagtttt tggaattttt 480
ggaaaaatgg ggcntggtat gttgnccaag ctggcttgaa ctctgagctt aagggtccc 539

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<210> 10287

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10287

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gctagttatt aagaacaaag ggcattgtgc gtaacagggg atctaattac tgtaagccag 60
aatgattgct gaaatgtcaa aatgtaagat tgaatgaggc tatttaaaca ttttagtata 120
ttttgtctta ctgaaattga taaaaaaaaa aaactggcaa tgtaactaaa tgcgtaacta 180
attacttgaa ataaaaagat tacttgaaat tcaaattaag aaaaatccat tttaaataat 240
ttgtgggtga taatctccat ctgcatccat ttatataaaa cttaaaatgc caaaaaataa 300
agaccaatat taatctcttt atttctgaat gagatgaaat cactgacatg tttgatgctt 360

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ccactattag aatataccct ttaaacacga aaagaacaac tgcaggagct ttaacatcca 420  
 ttatcatggg tgaacatctt tggtacttct aaagnatca cacctatttg ggaggtnaaa 480  
 aacctgaaat taaaagcttg naccaaagtc tgggtttaaa aaggcaattt aattctgcat 540  
 tctggaan 548

<210> 10288

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10288

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 catacatcac caccagcaaa cttctcgtga aagtcactct gtcctaaata catccttgca 180  
 aagttaatgg caagcagtgg atcatgaaca tcatccagtt caagatggct ttcagcaatg 240  
 gactgcatct tcatcaggtt ctccttggtt gcctgttgct cagtaagaac ctgtggagtg 300  
 gaatcttctc catgtcgaag acgggactgt acagattcca gaaagagagt gtataaactt 360  
 tttctttctg catctctggc tctgcctgg caggtgggtc tctccgcaca ctgcaggttc 420  
 ttcagcagct gcatcgactt gccagccatt atgatctggc ttcaggacag gtttgaagga 480  
 aggacacat ggngtgctgn ctgctggang gccctggcac tggcggaact tgcactaccg 540  
 tatnactcat tttt 554

<210> 10289

<211> 565

<212> DNA

<213> Homo sapiens

<400> 10289

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cattaggaga acaaagataa tatttgatag aaagactgaa aacacatcct ttgcttttca 120  
 gagaaaagac tgaatttaca ctggtactgt tagaaattct tataattagg ctagacgtat 180  
 aagaagttag ggcttttgct gttgcttgta tgttttgaaa aatacattcc cctgggctag 240  
 ccaacatcac tgtcctgaga cccagacctt caggagtctc ttgataaagg ctgctccgca 300  
 catggtcaga aaagtcgggt cagctcatca tgtcgagact gcatggttca gtgttgccat 360  
 cactgcgcaa cgcctctgcc acatctcttc tgaatcagac agattttggg gtgaacctgg 420  
 ctctggctctt gacggacagg ttctgggtcca ctcttcatt aaggttcttg aagcactggg 480  
 ccaaggacct cctgcttggg gaagggctgg ctggttatna acttggtntt aagttactgg 540  
 aaaaccttnn natggncccg gataa 565

<210> 10290

<211> 512

<212> DNA

<213> Homo sapiens

<400> 10290

aaacacaaaa tagtctttat ttgtcaacga aggctacacg ggatcacttc tggttttggt 60  
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 atttacacag tcaagataca gtgttagaaa cacaaaagtg ttgagaaaaa aacttctcaa 180  
 aattagtcc agacttcagg aaaatgattt ccacatggta aggccagagt ctccagtgtt 240  
 ggcatccag aagcagcttg gtacagactc cttttgccga agctgcgggt tcagagggtgc 300  
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 tggggcaccg ccagacacct gaggtcagc tcctgccagg acggcccagc gtgctccaaa 420  
 ctaagccttc cttggctggt cgnctcaga ataaatcaca tttcttgggg ancnagaagg 480  
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<210> 10291

<211> 585

<212> DNA

<213> Homo sapiens

<400> 10291

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caggctataa ataagaattg accttttcgt gggtcacaca tttgttgctg aagtcttcct 60
gtggggctgg gaaaagagtc aaaacatga atcttgaata ttcttcctgg gaaaaactca 120
naacgccagg tggcgtctct gcagacagct gtgtcccgat gcccatttc tgggccctgc 180
cggaaggctg acactatgga gcttgtgctc cgtgatgcc agggttctg tgaatggcta 240
aactgcattt tgtaattctc tttttaaga gcttgccctt ttctggagct tccaccctct 300
tccttcatcc ctataaaaac agatctattt ttggcaggta cataactga gccagattct 360
cacactgcaa ggaggcaggg gagtgcaggg gaagcaacct ggggaagggg aaagagtgca 420
gggaggagac gactngccct tgactgnacc ncaagttgaa ctggngcta cttggaagtc 480
aagccttncg agtgaaccct tgaaaccatt catnggggct taaggttccc atgggcnnct 540
aactatccng ggcttaaggg tgaccttttg ggggtttttg gaaaa 585
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<210> 10292

<211> 459

<212> DNA

<213> Homo sapiens

<400> 10292

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gccatggcaa cacaggttta tttacacat accctggatg caaggtgggg cagggttgcg 60
gggagggaga gggagtacag tgatgtcaag agcacagggc tcctggcctt canaccagtc 120
ctcagctaca ttgctgcagg caaggccggc accagcccc aggctgagtc atgggtaaag 180
gccaagagct gaaacaagag tttctcatgc accaggcaca tttataaagc aaccatcca 240
cctggagccc aaaactgggt tgacagattc cagagaggca aggtccttga tgacccata 300
actcccactg cccctttaac aagggaactt taacacctta tgataacca aatcctaaac 360
actgttgccct ctgccgcctc ttccagacac agaaggcatg atcctgctga acactggcct 420
cgagggaact gnggntgaaa ncccngngcc cantgntca 459
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<210> 10293

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10293

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cttttttct tttttttta gacggagcct tgccttggtg cccaggctgg agtgcagtgg 60
tgcgatctca gctcactgca acctccacct cctgtattca agtgattctt cagcctcagc 120
ctcccaagta gctgggatta caggcatgcg ccactacacc cggctaattt ttgtattttt 180
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tccacctgcc tcagcctccc aaagtgctgg gattacaggt gtgagccacc gcgcctggca 300
atacttacat tttcttttct gaaaagtgag tgtgagaaga caaagcaatc ctacactaaa 360
tttattacgg aaaatgtttc ttcctggtag tttnaagtga tcacataagt cagcttatgt 420
taatngctct actatagagt atgagatant ccagagatcc cactttaagg aagacacagc 480
cttgggggct ggccaggntt actggagctn ggacctgaaa ttcctggtcn naacctttac 540
tttnagnttt tgaataccan 560

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<210> 10294

<211> 571

<212> DNA

<213> Homo sapiens

<400> 10294

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agacacagtc tcgctctgtc acccaggctg gagtgcata gcgtgatctg ggctcactgc 60
aacttcacc tcatgggttc aagcaattct cctgcctcag cctcccaagt aggtgagatt 120
acaggcactt gtcaccatcc ccagctaatt tttgtatttt tagtagagaa ggggtttcac 180
catgctggcc aggctggtct tgaactcctg acctcaagt atccaccccc ctcagcctcc 240
caaagtgctg ggattacagg cttgagccac cagccccggc tcccatagct gctttttgta 300
gttttctggg gatatacagg gcagactggg tcataaaatg tcctcccaaa aggggtttgt 360

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ctctcctttg aggcaggatc agtgatatta tacttccgat tgcttcaact aaatgccctt 420  
 gaaacaaacc tggattctta tctttatcct gagaatcttt cctnacctgg tcatagatac 480  
 angcnttttc aaacaattct tnatcenttc aacgaacaag ggccctttga acctttcttc 540  
 ccaaggccta ntgggccttt ggaaaatccc c 571

<210> 10295

<211> 500

<212> DNA

<213> Homo sapiens

<400> 10295

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 acttgttccc cccattcctc acagaaggca caaatacatt atttctttcc atgtgaggag 180  
 atgcgaggag aggatacaga atacaggaat cctcaaaaat acaaaaaacc cctccaaact 240  
 gaatacctaa ggttatggaa aaggctaggg tggggcacag aagtcaatgg gggaacagaa 300  
 agaggaacca atgaaactga gaaccaaag ggacctgaga ggccatgatg tccatgctgc 360  
 tgcctctgtg cagaccccag agaaaactca ggtaaacc aa cgaaaactcc aaataagaaa 420  
 gggtaggggn gccccaagaa ttggctttgg ggcatcagac caaggantgt gaatgtaatt 480  
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<210> 10296

<211> 567

<212> DNA

<213> Homo sapiens

<400> 10296

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 aatcttcttg ctgcatattt cacagtattg aattctttct tggtaggttc tccatacaag 120

ttatgaagca ggataaaagt cagtcttata ttaagtcatt gtaaatacgg ccttaatttc 180  
aatcaccaaa gaaatgtatt tttgttgat accatgggtg cagcatgttt tattaaaact 240  
aattatatca atagctacct gtagagtatc aacttaaaaa ttataatgcc atttctatga 300  
agtcattact tttataggac tagcctgtgt catatgtgtg atcaatattg gtttaatgca 360  
gaaacaaagg cagctgggtg tccaagcaag ccacttttct gggtcagggt ttcagtggta 420  
ccatagatgg ctgccagtct caatgtcact ttggcccatt tatctttata aatcatacca 480  
tatagcttcg atatttccat ccnttnaact ggagggccgg ccccggggnt tacgcctgga 540  
atcccagccc ttttggaggc cgaggcg 567

<210> 10297

<211> 515

<212> DNA

<213> Homo sapiens

<400> 10297

cgggtgcaag tcgtttattc gggagctgat tcctggaatc acgganaggt ggtgaggaag 60  
acagccaggg aaggaggana gctgctgagg gccacgcgaa tgagctntgg ccaggagacc 120  
accaagagtc agtgtaggat gcacctcgga atcatgccac taagggcatt gaggctggag 180  
tggttaaggaa gctgggggtat ttccactcaa tctgggctct tattgttana naggngcctn 240  
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gaactgtcct ccagtagacc aacggaaaag tgtgctggac ataaacaaca ccacactgac 420  
caaaggccca naagancntt ggaacttgca accaggcgct taaaactngc acaaggtgaa 480  
agnctcagga nttaaagtcc aaaatttgat gggna 515

<210> 10298

<211> 581

<212> DNA

<213> Homo sapiens



<400> 10298

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gagactgagt ctcgctctgt cgcccagact ggagtgcagt ggcacgacct ctgctcactg   60
caaactccaa ttcccagggt cacaccattc tcctgcctca gcctcccaag tagctgggac   120
tacagggtgcc tgccaccaca cccagctaatt tttttgtatt tttagtagag atggagtttc   180
accatgttag ccaggatggg ctgtatctcc tgacctcatg atccgcccac cttggcctcc   240
caaagtgtctg ggattacagg catgagccac cgcacccgac gaggtctgat ggtttttataa   300
ggggctctcc ctgcttcgct taacacttct ctttcctgct gccttgtgaa gaagatgcct   360
tgcttctctt tcaccttctg ccatgattgn aagtttcctg aggcctccca gccatgctgt   420
gaactgngaa gtcaattaaa cctctttcct ttataaggta cctagtcttc gggcagtctt   480
tacagcagta tgaacctgga ttaatatcct agtaatcaat cctttnccaa gcatgggaag   540
nctacctgca caatttcttt nnagnncctt taactcttgg c                           581

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<210> 10299

<211> 578

<212> DNA

<213> Homo sapiens

<400> 10299

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ctggaattat ttatccaggc agaagtataa gaatggaatt aaattatctt ttgagtttct   60
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ttttttctat aggactcatg actccaggaa aatacacaaa tcccttttta gaaaaatctg   180
atgttttcac ttggtatatt tccatctctt ctttatcccc tccacacctg gagctccac   240
tgaatttctt aagacagact ctgagccggt gtaattagat gggagaatta catggagtta   300
catgggggtga gatgctggcc ctctgggatc tctgggttcg gagaagggtc cagggtggag   360
aggcagaaca agtgggattg tgcatgataa catctcaagt gattttctca gtcagaagat   420
aaagcatatt ggtaagaagg gcatctacag cgaagcttgc attgagacag ttacaattgc   480
acactcattt taaaaacaaa ctggccaagn aattncngct ggcgtttaac cctgggaaga   540
ngngaacagc tgggagtggg tttcccccaa nccatggg                               578

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<210> 10300

<211> 463

<212> DNA

<213> Homo sapiens

<400> 10300

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ggcagcagca ggagtgagag ggggtccctt gtcctgcccc ttgcaaggg ttcaaggctg 180
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gagagtggct acgtagagag tgagagcgag attcctaaaa agatgcacag agagaccctc 300
agagaggcca agaaagatgg tgaaaaggta aggaaagaaa aggaaggaag aaaagaaaaa 360
aaagaaaaga gaaaccnnag ggaaatgggt tgcactggct taagaatggn ngaaggancc 420
gnccaattcc tttcctaagg ctatngaate aataccgggg gaa 463
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<210> 10301

<211> 517

<212> DNA

<213> Homo sapiens

<400> 10301

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ttttaggtc ctttaaagtg tatagttagg tgactgattt gagatctttc ttttattttt 120
tatttttatt tatttatttt tttttgagat ggagtctcac tctgtcgtgc aggccggtat 180
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ctcagcctcc caagcagctg gaaccacagg agggtaacac cacaaccagc tgatttttgt 300
attctaggta gaggtggggc ctactacgt tccccaggct ggtcttgaac tcctgaactc 360
aagtgatcca cctgccttgg cctcccaaag tgctgggatt acccgctga gccactgcgg 420
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ccagccagtt gggcaagtgt tttctttttt ttctttntc tttntttttt ttttggaan 480  
ggagnctcac tttgttgncc aagcntgaat gcatggc 517

<210> 10302

<211> 596

<212> DNA

<213> Homo sapiens

<400> 10302

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ctcctgggct caaatgatcc tcctacctg gcttcccaa gtgctgggat taaaggtatg 180  
agccactgca cccgccatt ttttaataagc attattttta gtaagcaaac actctctaca 240  
gcatagaaat tgcttatttg ttctaggcat tgttcaagaa gtgggatcct gtttgtggct 300  
cccagagtct ctgaggtaga aaccactaga gatgaagaaa tcgaggcaga cagatgaagt 360  
aacttggctg agtgcaccag caggcaagag gcagacctgg ggttcaaacc cagccagcag 420  
gactccagag aatggggctc acaagccgct ttgctatacc gcttttggac tacctgggca 480  
gctgaaatgc aaatcttaag gcccacctgg ttaagcacac ttttcaaggc cttgaactgg 540  
aaangacca ncagggcct taagagcagc cgattaacca ccnttggtg tgggac 596

<210> 10303

<211> 553

<212> DNA

<213> Homo sapiens

<400> 10303

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gatgggtcct ctgggtagct gatacagaca tggagttaa agagcaagag atgactaagc 180

gtgactcctg ggaaaaataa aagtgggtag aagcaggctc aggtatggaa aaccttctgg 240  
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 ccacagggag ttctaggggtg tggagcctca tgttgggctg aatcagccat gccctgtgcc 360  
 tttctgtgcc cacgtattgg ctggggactg cagagaaaga ccatggcctt aacttgaaag 420  
 ccaaggccga ccttaaatga actaccagat gcaggttggc aatggtagct acctgcactc 480  
 attgntgggg aananaaagt cttctntaag ggaaatctga aagcttttgg cctgggcttg 540  
 catgnaactn tng 553

<210> 10304

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10304

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 attaaaccct ctaaccaacc taacactcgc tttcagaggc acttgtgatg attttcacag 180  
 cttccatagt tgcaaagaac aaagaaatca tcttccaaca ggggtggaat tagataagaa 240  
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 tacctaggat acctaattat tcaaggtttt cctaatttag tagacttttt cattgcctac 360  
 aatctacaat attcagcaaa gtattaagga aaatgaaccc aagaacctta acccctcaaa 420  
 taggtttatg gatatactaa actggcaagt acaatcttta tcttaagact tgagaacggg 480  
 atgcaggaaa acaaactttg gnggaatctg gaataaggnc ttaagctggg caaactaggn 540  
 gngnaancct ggatggttaa 560

<210> 10305

<211> 568

<212> DNA

<213> Homo sapiens

<400> 10305

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caagcgattc tcctgcctca gtctcccaag tagctgggac tacagccatg ngccaccaca   180
cccaattaat ttttgggttt ttattanaga cggggcttca ccatgttggc caggatggtc   240
ttgaactcct gaccttgtga tccgcccacc ttggcctccc aaagngctgg gattacaggc   300
cttagccacc gngcccagcc aacacatttc ttatacaaca tggttttgag ttattttacc   360
tacaaccaac tccagctggg ttaatgngta gcttacagaa ttgaaccac ttttttcaga   420
cttggctacc ttttctacaa gggaaaaaag gcattttaca agacacagaa gcccctaagt   480
ttggaaatct ctgncaaaaa aggggganaa naaagacttt ttcaagncc cgaaagggga   540
actatgggga aaggattaac ccccccaa                                     568

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<210> 10306

<211> 569

<212> DNA

<213> Homo sapiens

<400> 10306

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gttttgctaa actaagattt ccagaatatt cttgattagt caatttctca ggaactaatg   60
tcttaaacct acaaaaggaa gcaggacttg agggaatag agcaagtttc agaggcagaa   120
ggccctcact gagcttccag taatgttccg tggaagctgt gtgactttag gtgagacact   180
cgggctgccc cagagatctg gaacaagtcc ctcttcacag cgacagcatg atgcagggca   240
ggcaccagca aagaagggtg tggaaacttt taaaaactct gtttgggggt acctgactgc   300
accaggttat atctaaatgg ccattcccca aaagttttta agtggtgaaa ctggtaagtt   360
ctgtaatttg ctttcaaate atcccaaaag tggtcatttt ctctacaatt ctatacatac   420
ttctgtacca gacatgggca gtacaggatt ttttaatcca cctanggaag tcccctgtgg   480
tcaggaaatg gcatatttca cccttaaaag ggccctcttg ctctttgntg ggaacttttn   540
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<210> 10307

<211> 553

<212> DNA

<213> Homo sapiens

<400> 10307

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ctcattaaca caaatattta ttgatactat ttatacagta aattaggttg aatgtgaagt 60
tttggatagc ctgaattcac cattttcttg tgcacaaatg ggcatttttc tcattttaca 120
atgggcattt ctctttggca tccattaggt atttgcccag atattggcct ctgtcaaata 180
ttttttaaaa atcaacctag tttctattaa acaaaactaa aagtgattct atggagagtg 240
attgtatgat taccaaacac atctgatgtt aaatgtcatt aaagtgctgt ttgatgatct 300
ctgcggtttg tgctaattaa gacagagagg gctgggattt tataaatccc aagagtctta 360
tctgaacagt ctgcatataa aagttgnttt ttagcctggg gaagggtatc catgaagccg 420
gggacttntg gcattctggc cttgctgggc aagtaccagn catntttcca acggnatctt 480
catgctccat aggttttanga gctggcaagg atctggnaac aggcttggca agtttgctgc 540
aaggcnctgg tat 553
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<210> 10308

<211> 538

<212> DNA

<213> Homo sapiens

<400> 10308

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gaaccaatca atcactggag acacacagac tccacctgta tcaaacgagg ataccagcca 60
cccanacagc cccagtccca gctccatcca tcttgcaatc cctcctccac agcacagcac 120
agcccanacg ctgcctntgg gaaggaagcc tgaggccana gttgctgagc cnttgggaaa 180
atctggaaat ttggtttccc caagatagac tccacctcct ntggaaagat gctgngctcc 240
tgacagggct ttgtctccct gggaaggaat ccatgtcttg ggaaggctct gcatcccagg 300
```

aaaggctcca cacctgcagg agggactcct tggctctgag ggactctgtg cctgcatagg 360  
ctccagtcct taanaaggac tccatgatgc angggggact ccaggccctt aggaagttn 420  
catgtcctgg gaaaggnttc caggteccca ggcttnggc caanatcccc agggcgaaaa 480  
actgggtcca aacaggttcc anagnccatg ttgnncaact tgaaaaccct gggnaggn 538

<210> 10309

<211> 547

<212> DNA

<213> Homo sapiens

<400> 10309

aaggcattag acgtttgatt cttttatttc catatgcaat gtaatgttta ggcacgctgc 60  
ttgggatgct acttctaaaa aaattgttgg ccatttttca gaatatacctt ttggttttaa 120  
atactgggtca ggaaaaacaa atgatgtaaa aatacgtgaa taattttcta ttacagaaat 180  
gaaaaactga tttgcatcta aaagtgaag aggtgaagta atttaaccct ttcaccagac 240  
gatatggcaa tatacaatat attgcttgag ctgtttgaga aggctgtgat gtatttttgt 300  
attgacatag aaaattataa attacattga attagtatcc ataataccta tatatataca 360  
caaaccagtt ctaaaaaaaaa tacactgggt taaatttatg agtgaaaacc tcacaaggtc 420  
agtaaacaat tagcatgctt cgggccagat ttggattct attttaaaat ctacgctgta 480  
aaatgaacca ctctaattca ntagcagccg agccttttca ctgacttgcc nataggatta 540  
tttaggg 547

<210> 10310

<211> 568

<212> DNA

<213> Homo sapiens

<400> 10310

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ctgcagcttt gacctcccag gctcaggtga tcctcccacc tcagcctccc gagtagctgg 120  
gactacaggc atgcaccacc acgtccagct aatTTTTTgt actTTTTgtg gagacgggggt 180  
ttcaccatgt tgcacaggct ggtctcagac tcctgggctc aagctatccg cctgcttcgg 240  
cctcccaaag tgctgggatt acaactggga gccaccgtgc ccggcccagag atctctcctt 300  
taacaagaag ttttttgcct tgaaaatgtt tgcaaaaagc gtttcttgat tctgtcaccc 360  
tgctcccaaa gcaacacgtg actacttgca actcantaaa gaagaagtgg ttgaagttgc 420  
tccttagccc ttaaaaaatc attaaataat cctctaggng gatTTTtaac actagcaaga 480  
aaagctaagg gaaatggcaa gaaaggangc gggactttcc angttgggcc acgaaatacg 540  
ggntggcttt cctttanacn aananggg 568

<210> 10311

<211> 531

<212> DNA

<213> Homo sapiens

<400> 10311

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gcgttataat gccaccattc aattacacgg taagacagta ataccccacc tttctatgga 120  
gcccttggag gtgccaggca tgtgctaatt tgaggTTTat ctcatTgaat cctcacagca 180  
atcctaagaa ggagatgcta tcattacccc cagTTTTcag atgaggaaac cttcagctca 240  
gagaggTgaa gtgacttgcc cagggtcaca cagccagtaa gtgatgaaac tgtgtggctg 300  
tgctctctga atccagagta atttaaaaag tccaagtagc agcacatagg atccacaaca 360  
ctggatgaca ggggtcgcgc tgttcagagg actgggggcc actcccatgg ctgcagatcg 420  
aactctacaa tcaccttcaa aagngcctgg gcctttgcta tgcctntggc caccttctgn 480  
tgnttctggc atngnctgnt tactggcttc accagncctt ttctacttcc t 531

<210> 10312

<211> 571

<212> DNA



<213> Homo sapiens

<400> 10312

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cttcaggggc ttgagggatt ataagtacct catagtctaa atttgagcat attctttttg  120
gccattttga tagggtttgg ctgtgtcccc acccaaatct catcttgact tgtggctccc  180
acagttccct cgtgtttgtg gagggacccg gtgggaggtg gttgaattgt agggggtggg  240
tctttcccat gctgtttctca tggatgatgaa tgagtctcag gagatctgat gattttgtag  300
gggagagttt ccttgcatac gctctcttcc cttgtctgct accatatgag acgtgccttt  360
aaccttccac catgattgtg aggcctcccc agcctcatgg aactgtgagt ccattaaaca  420
tctttctttt gtaaattgcc cantcttggg taccgtcttt atcagcacat gaaaaggac  480
taatatcatt tattctgaac atacttactg gacattnaat aggnnggaaa actctggctg  540
ggggnnnaat ttgaatgaan ctaatccttg c                                571

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<210> 10313

<211> 567

<212> DNA

<213> Homo sapiens

<400> 10313

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gcccttttca ttttctttta atgtccagag ctttcagtgt tgtcatactt taattcaaaa   60
gtcaacataa aagtttaata catatagtaa gctgaaaagt gttagtgaat tgagctgagc  120
tttgcttttc caaacatggt tccaaaagtt tatttttaaa cacacacata gtgtcagata  180
caaacgcctt ttaaccactg tgggtgggaa gagtaactg attgcttcca atgatcatct  240
cttccctctg cgtccactgt tctcagagtc tcaggagagta tgagaggatg tgtctcttcc  300
tttacttccc tgtttgttgt aatgagtcct tcgatgagag taattacgtg accgaatttt  360
ccataactat ttgntgatta ttaaagtttt gcagtggctg gntttcctaa tggggncctta  420
caaccaagca tttcttctaa attgggtgng gcanggtcat tcacattaaa tataccggtg  480
ttaattancn tcttcttctc actactccga gccttaaaca ggctgnttaa ggcgttttct  540

```

gnncatcaga agatatncct cttacct

567

<210> 10314

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10314

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gagaaggagt ctcactctgt cgcccaggct ggagtgcagt ggtgcatct cggctcactg   60
caacctctgc ctcccgggtt caagccattc tcctgcctca gcctctggag tagctgggat  120
tacagacgtg ccaccacgcc tggctaattg ttgtattatt agtagagatg gggtttcacc  180
atgttggcca ggctgggtct aaactcctga cctcaggatga tccaccacc tcggcctccc  240
aaagtgcctg agttacaggc gtgagccgcc gtgcctggct gattatgctt ttttaaaaca  300
gaaatgaagc atttatcttt ttctctctgc ctaaccctc cagaattcaa aaattctttt  360
tttgangggg tgtggggagt tgggggacgg gagtttggtc tgnccctgg gctggagtac  420
aatggcacga atcttagcac atnacaacct tcaacttccg aagtcaagt atctcctggc  480
tancctccca agnncctgga atacaggcac ctgccaccac ggntaantnt tttttttttt  540
ttttgcattt ttcaatnaaa a                                           561

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<210> 10315

<211> 568

<212> DNA

<213> Homo sapiens

<400> 10315

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aaacttttat ctttgtaaac aacgcacatg aaccagatgt atttctcagc tttaacacagg   60
ggaaaagggg aattaaaaaa atacgcaatt gccagcaaa tgcaaatgtt taaaaaggaa  120
acacggagaa ccatgggaat ggaacaacag acagaacttc aaacaatgag agaaaaaacg  180
aacaaaacaa caagagaaaa cacaacagat ctgcaatcca ccaatcgctt tttcagctga  240

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atgggggtta ctttaagacc agaagttaaa gtcactgctg ctggtaggct gcctaattcc 300  
 gagtagctgg ccctgcttca gggctggggc accaaagctc gaggagccag cctcttgggt 360  
 gccattctgt gatgggggca cctagtgggg acttttcttt aagttcaccg attactttta 420  
 acagcatagc tccctntccc agtccttctg ggtgggaacg aacacgttta tgagaaccac 480  
 gtcttccagt tctttaaaga gaacctgggg ctgggtattg acagatatcc gntgggtgggg 540  
 nttatcgat tnggttaant ttataacc 568

<210> 10316

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10316

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 acataaggca ctgggcaaat gtgacgtagg ctgggatgaa accattctc ccagagccgg 180  
 tctctccac agcacaagc tgctcctcat gcagccagct ggctgagggc ccggagtgtg 240  
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 aagggcgcg cttctgtacc agcatncant ccctgncagg gccttttgag acccgatcct 480  
 ttggtcatct tctcctggtc agcccacccc tggcaaaact ngngatccct ttanatnacc 540  
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<210> 10317

<211> 567

<212> DNA

<213> Homo sapiens

<400> 10317

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cttttttccc agtgaattat ttttttattt tgtagagacg gggctctccct gtgataccca 60
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gattacaggt gtgagctacc acgtctggcc tgggataact cattgtaaaa ctggtgaaga 180
cctgggacct tcccagtaga caatgggaca gagtgattga caggatgagt tctggagtag 240
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caaccagtcc tgcaggactt ggccttgga ttcagctgc tgctgctttt taggaagccc 420
ctgctggctt caatctgctg cttcagaccc aggatgaaac ttgttggggt gatggcatan 480
gcgtaacttc cancattagg gattctttac gaaaacctgg atctcggaag ggatggctcc 540
accnaaanat ntnaatgtgg gaaaaaa 567

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<210> 10318

<211> 574

<212> DNA

<213> Homo sapiens

<400> 10318

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agacagagtc tctctctggt acccaggctt taaggttttt ggtagacaca gggctctcact 60
atgttgccca gtctggtttc aagctcctgg cctcaaatga tcctcctgtc tcagcctccc 120
aaagtactca tattacaggc atgagccacc atgccctgct gtaaattggt ttgaacagag 180
ggtgaaatag gcttagggag gaacatactg agtctgaaat agaacatcca ggtggaggat 240
cagccatcag tgagagctgc acaaaggtea tgattagagc attgactcag cttagagaag 300
ggagtcagag ttcagacagc cacaggcaat tcctagagta agtgaagaga acaattttga 360
aaggcacctg ctgaagaaaa gcaattattc attcctaaaa ggcactggcc gatccttnac 420
attgaacatc agaaaaagga cacttctgna acaaggcttc tgnngggcca aagaaaaact 480
cttttcnggt cctaaaaaat tttcaaaaac ccgaccnctt taatgggaag cttcatttaa 540
aggccttntt aaaanaacgt tccggaantt ggaa 574

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<210> 10319

<211> 465

<212> DNA

<213> Homo sapiens

<400> 10319

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aaaagaataa aatttattgt actctcctcg cccaggggtg cccctgggaa agcctgaggc   60
tacttgtagc cgttggcctt gngcttcggc aagaaggcga agctgggggg cactggccca  120
aggagcatct cgctgatgcg gatccagtcg gctgccttct ggctggccat cagcgtctcc  180
aggtagtcgc ggcccaggta gtagggcggc cgctcgttga tcctctgngg gagccgntcc  240
agcagcccca cgggcacgta ccggcacagg aaggacagcc actcgagcag aaagcgccgg  300
gtcttctcca cgccctgcgt gtccgagccc cagtgtctca ggccgtantt ggtgaagtcc  360
cgcaggatgt ccaggccgct cggacgacga gatgtcccan tgccgntgnt ccttgatctc  420
cgggaaaagc cncnggttga gcaaggcgcc acgggcnaat atgan                    465

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<210> 10320

<211> 569

<212> DNA

<213> Homo sapiens

<400> 10320

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gaagaaataa aactgccttt atttgcagat aacaatcaca tacatagaaa atcctaaggg   60
atttacaaaa aaagctgcta aaactaataa ggagatttaa cagtattgca ggacacaaag  120
catttctgta tcctaacaaa gaataattaa aaactggaat ttaaaaaatt atttaggctg  180
ggcatggtgg ctcacaccta taatcccagc actttgggag gctgaggtgg gaggattgcg  240
tgaagccagg agtttgagac cagcctgggc aacaaagcga gaccctgtcc acacaaaaaa  300
caaacaaagc caggcatggt gggatatgtc ctgtaatccc agctacttgg aaagctgagg  360
caggagccca ggaaagctga gacttgaaa gctaagacct tgagcccagg aattcaaggc  420
ttgcagtgag ctatgagcat gccactgnac tctanaatga gtggccgaaa aaataaacct  480

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ctatccctga ggggtactatg atgcatacnt gactggnttt gggaaaaact ttaacccttt 540  
ttcccnnggt ttatccctacc taacaccan 569

<210> 10321

<211> 569

<212> DNA

<213> Homo sapiens

<400> 10321

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ggttatcaca ttcccacact cctaataccc acaaaacaag aatttcactc catgacacag 180  
aggaacattg aatggtagct cagaaatgtt gatagctgag gtactgaaac taacaaaagg 240  
attttggttg tccttgatta ttctgtcctg tgatgaataa aatctacact aaaggacagg 300  
taaggaaaac ttatagcaga aaaaagacta gatgtaccaa acacagcagt acaaaccact 360  
ccttggcaga catgtgcttc taaaagaatg ggggcagtaa tcaggtagct gaactactag 420  
gctactgnca ctcccagccc atcccgaatt aaatagnngg gaagggtaat agngtagtaa 480  
gtattgatcc aacaaagaaa ggntttaccc ccattcaagg gaacattggc atggnttnat 540  
naaccctggc ngggaataan aagcctgga 569

<210> 10322

<211> 559

<212> DNA

<213> Homo sapiens

<400> 10322

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gcaggggctt ccctagcttc atatcccca ggcccctgcg cctctggaat gtaccaacaa 120  
ggggcagggg tttcaggggg ctacgcctct tcatggggca ggcctcagcc ctgggtttgt 180

cacagtctgg ccttgaatit gcctttggcc ttgaccttcc gacaggtgct aggaattgtt 240  
 ccgacttcaa agggcagaga caacaaggca cttccagctg ggggcctcgg aggcacagga 300  
 gagcaggaac ctttcttggc ttcaggatgc tgggtgccac cttgaaatca aagggttcgg 360  
 tgggagggaa aatgaagacc ttaaccctg ggtaaaagcc ttaaagggt tgcctgtggg 420  
 ccacagggcc ttaatgccac caacttggtt ggcttgcnc tgaagacctg gcccttgggg 480  
 tcgaatcatg gggaanaagg cacttgncc ttgntggaa gcttgggaaa tgnnacggct 540  
 ttcccaaaaa ccttnttgg 559

<210> 10323

<211> 565

<212> DNA

<213> Homo sapiens

<400> 10323

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 ggaggagtca acatgagaga gagttgctca cttgagatgg aggcgggcat gtggtctgag 120  
 aatgtgccct ggccaacagc cagcaagaaa acagggacct cagtcctaca gccaaaagga 180  
 agtgcattct gctaacgaca tgacagagcc tggaagtggg tttttgccag agcctccaga 240  
 aagaaataca caggggctga caccctgatt ccagccttgt gctgtttgct atctgtttcc 300  
 tatctgatac tctttaccag gcaggcttgc tgggtttctc aacctacagc tagtaaacia 360  
 gtgttgtttc atgctgctaa gctagtggta gtctattaca gagcaatccc aaaccatccc 420  
 caccacacia actggccaag taagagatct tcttngact taataaacat accttaatat 480  
 atgcttatcc tgattaacat aaattccata tatatatata tatgaatgac agcttntaaa 540  
 agaagtcnc nttctntntc aaggn 565

<210> 10324

<211> 474

<212> DNA

<213> Homo sapiens

<400> 10324

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agcagccttt cctgctccca ctttaaagat ccctggtggg ccatgcacct ccaagatggg   60
caggggagct acacccattg ttacaaatag gaggcacag actctgtatt taaaaacaga  120
actgtgcaat gagaatgctt taatcatcac ccacacagac gagcggaagc tacagacaga  180
gaaccactac ggatggtgcc tggaacagag gtgagaatgg cccaaaactc tgcctccggg  240
aaaggtgcca agtttacagg acttatcgtg gtgccctcac cagaccctc ctncttctc  300
tctcctcctc ctcctcctcc gtggccgctg gcggctcctg catctcctct ggggaagcct  360
gaggccggct cgggtaactt ctgctgcctg agacagtcac acgtgcttgg gacctttnac  420
ctgangtctn tgggtgctga actggantgg angtanctag gcntgggaaa aaaa      474

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<210> 10325

<211> 545

<212> DNA

<213> Homo sapiens

<400> 10325

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ggagagacgg ggtctcgctc tgttgcttag gctggtcttg agctcctgac ctccagcaat   60
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ctttgaaaat attaattctg acttcctata attcccttct atctactcat gcaatacaat  180
tatattttct aatatactta aaaattagaa aattataatc agagtacaga tgtttctacc  240
agattaaagc tttaaattca acgtttaata cctaagcttt taacctgtct tcagcaattt  300
caaaaagcta atacaaatga tcaacaactt gtatatatat ttactagaa gtgtactcta  360
ccatttctag aatacgtggt tagctttatg acataatttc aaggacgtat tagaccccca  420
aatatttaaa aaagcngaaa ggacctatat nggatgattn aaaatctcat tatectactt  480
cttgaagagc taaaaaaaaa ncaaccaaac nentaccccc caagtnttta acatttatcc  540
acngt                                           545

```

<210> 10326



<211> 442

<212> DNA

<213> Homo sapiens

<400> 10326

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caggtttcaa aatgtacagc cagggcatgt gctcatttat tagggctgac tctccgtgtc 60
cgcttcctgg gaaagaaaat ccctgtgaca tgaaccgatg aaggacaga agctatcaca 120
gatgctacag ggctcagaga ggggccgggg caatctacac tacagaagta aaagcaacgt 180
aaaatgtttc tgggtttcct ttccttcac tcaaaaccac tatttcctta gttctatcaa 240
agtacgtaag gggcataaaa tagactcagg aactcggggc taaatcatcc aaaaatggag 300
ccaaggctct aactagaaac tgtctctgtc gtccctgttg gcctcaaac cccgaggtaa 360
aaggctggtc tcgntcctc ccaggcccc tggntccan nacagtgcc cgtcctntgn 420
gttcatcatc atcgnttttt aa 442
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<210> 10327

<211> 580

<212> DNA

<213> Homo sapiens

<400> 10327

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aacctctgcc tccaggcttc aagcgattct cctccctcag cctcctgagt agctgggact 120
acaggagcgc atcatcatgc ctggctaatt tttgtatitt cagtagagac ggggtttcag 180
tatgttgccc aggctgacct cgaactccgg acctcaagta atccaccgc tttggcctcc 240
caaagcactg ggattataag catgagccac ctgccagct catgctgatt taaagggaca 300
aggcagcgag aggcagaagc agagaatcat cctcctcaag cccaggccc aggccaatgg 360
cgctgccttg gggacttgcc ggccgggacc accacaaagg gtcctgcgaa ggctgcagcc 420
gcggctgcat tacctctggc ctgctgcca ggtccagcac ggntgcgccc gccgcatcat 480
gggaaccccc cggcgggccc tggctggtga ngatgatccg ttggnnant tggcaaatg 540
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tggngaccac cttgacatgg gacgtggggg nctgttgccn

580

<210> 10328

<211> 432

<212> DNA

<213> Homo sapiens

<400> 10328

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gcaacctcca cctcccaggc tcaagcgatt ctctgcctc agcctcccga ctagctggac 120  
cacaggcgtg caccaccatg cccggctaac ctttgcactt ctagtggaga cgggggtttc 180  
accacgctgg tcaggctggg ctggaactcc tgacctcgtg atctgcccac ctggcctct 240  
cacgccacca tgcccggccc tgttcggttac ttacaaaaac ttctccctct ctttgtgctt 300  
actagcattt gaagaaatcc ctgcttctta ctgcctgccc ctcaaaacaa caaaaggggc 360  
caggtatggt ggctcatgcc tgtaatccca acactttggg gaggctnang ngggnggatc 420  
acctgangnt gn 432

<210> 10329

<211> 543

<212> DNA

<213> Homo sapiens

<400> 10329

gttgtcaata tgcatttatt tacttctttg acaagtttat ttttgcgtat ctactatgta 60  
cgatgcattg aagtccagng acaaacaaaa cacagggact ntgccctcct ggagccgaca 120  
tctggtgagg gagagacnca nactntanac agatatttcc aaatagcagg taagngctat 180  
aaacaaaggg aaacagggtg atgggataga gtgacagggg gtgggatgag ttgctatatt 240  
anatgaagng gtccaggagg gcttccctga ggagnggca tctggtctga gggctagaga 300  
atgtgaaagc agctgtcacc tganagctgg agaaagaaca ttccaggagg agggagcatc 360

aagacccaaa gccctgaggc aaaaacaagc ttgccatggt ccaggaacag tgaaaggaca 420  
 tccattgacc taatctcaaa agcttnttgn ccaaagacaa gcaaagggga cccagttccc 480  
 ttgggggggtt ccaaangctc tgtgcctgac cccanaggca nangntcctt ttttcaggct 540  
 ggc 543

<210> 10330

<211> 586

<212> DNA

<213> Homo sapiens

<400> 10330

gacagagtct cactctgttg tcaggctgca gtacagtggc gcgatctcgg ctcatgcaac 60  
 ctccgcctcc tgggttcaaa cagtatttaa atcctgcctc agcctcccga gtagctggaa 120  
 ctacaggcat gcgccacat gccagctaa ttcttgcatt tttagtagag acagggtttc 180  
 accatgttgg ccaggatggc ctctatctct tgacctcatg atccgcctgc cttggcctcc 240  
 taagggtgctg ggattacagg catgagccac tgcgcctggc gagaaccacg actttttaaa 300  
 ggaaaccttt tctcatgtct ttattattca tttgttttga aaatatcatc aagattaagg 360  
 atcagctaag aaacagaata atttacctt tacatttcat aattttatct atttttgctt 420  
 ataggggaga cttgagatta aacgactccc attggtacat ttttaciaat attttggttt 480  
 caagaaaagc atgtccattt tgancttcc atgnggnaat tcttgagaag cctaaggatc 540  
 tggcttcaac acaangnttc tggggcataa agggggcntt tggcaa 586

<210> 10331

<211> 544

<212> DNA

<213> Homo sapiens

<400> 10331

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aatcaactga ccacctgaa catttcacgc agtcaggga caggtgagga aagaaataaa 120  
 taagtgattc taatgctgcc taggtcacc tcaacccccca tttactggca caattgggtg 180  
 gagagaaggg aaggggtatg attgtcctga tggctcaggg ttgcaggagg ttcagagggg 240  
 aaggaggaaa ggccaggctg gaggtgggc tgtagcact tccctnccac agttcaaacg 300  
 gntcactctg ggctcagggt tgccatggct tcctttgggtc caaacatagg ccctgtcctt 360  
 agtcctgtgc cctgtttgac ttttggccag gaggcctttt tgtgctgctg ctgttgcagg 420  
 gctagctgca tggcccatat gctcantggc cccatgtagg ccantgagcg gnacactcgc 480  
 ttgttgcaat atgcctctng gggctggaaa ggccnaccan gcgctccaca cggaccggac 540  
 aanc 544

<210> 10332

<211> 547

<212> DNA

<213> Homo sapiens

<400> 10332

gaaggccaaa tatctttatt gcctccctcc catccccaat tcctgttcc cccaccaag 60  
 tcctgctagg aaccatcctt agattccagg cccagggact ccctccgagt accaggccgg 120  
 tatgctactg gccccgaggc aggcgagggt aggaagaacc ggggtgtccg cctttagagc 180  
 gctcccagcg aacacagtcc cgagtcctgc ggggtggggg cccctgccag ctgccaggcc 240  
 ccttctcttg tggaggacct tcaactcctt ggctatgggg ttctggcttt aggtccatgg 300  
 gtccttgag gggccccctca ggaggtggca gtccctgggt gtcacgggta cctttagggg 360  
 cgtggcactc cctccctttt ggggtgcctcc gtccgggctg tcgccaggga cctcgactgg 420  
 gcttgggggg atctagcata gctttctggg tttcgcccaa cctttgctga ttgacctgg 480  
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 ccgcttg 547

<210> 10333

<211> 548

<212> DNA

<213> Homo sapiens.

<400> 10333

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gagtgttttc agtattttat taacaaatga gctggcaaga ggacaagtga tctagtagta 60
tcacccccac cctcatggag cagccaccac aagcccacca tggtagggggg tgtccaacat 120
gctctgctgg ccagttccc agccgatccc ctgagtcttg gcgcccgttt agtcaccctt 180
cagctgcttg ggaggcagga agagacttcc cctcttcacg aggtaaggga gacaaaagca 240
gccatttgga tgccagggcc acaggggcaa gccatgccct atttcttttg agggacagaa 300
tcacttcttc ccaaggccag acactgtagc ccatgggtact cagccttcta gaggagggtg 360
gcctaacaga ggagaagccc tgagtggaag cagcattttg aaggcatcgg cattcttaga 420
ccagcttaaa actgagggca ttctctatct ttggcagcag acagtgagac ttcaggatta 480
aaattaaaag cccgngngnc atcctttctt gcattacttt ccacaaaacc ttggaggagt 540
caaatccc                                     548

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<210> 10334

<211> 544

<212> DNA

<213> Homo sapiens

<400> 10334

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ctcctaaaat tttttattac tttcagaagc aatactgttg canggtatca acaaccacac 60
tatgtacca aataaaatga atgtcagaaa taaaaatact gtcacaaaga agcaccctt 120
attggaagat gtattgaaga agtcttatta cactgaaatt ttatggcaca gatcataaaa 180
tcagagtctc ttcacacata ataacaattc atccattttg aaatgagtaa cttctccttt 240
gtagtgttgc tagtataaaa aaaggtacaa gttcaaaata tgctggcaac atacaaaagt 300
ggccaatagt tttggtcttt gagagtacac cctgcagttt aacaaagact ggctttgaat 360
cttcactca aaagcacact tctcttccaa aaagatgact gcccaactga tgccatccca 420
gagagcagat atcccaacca ccaacttgaa atggctgaac aaagaaaact acccaattac 480

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tttaaagatg gggaagcaaa atcaatggcn anggttttaa aatcntagga attttaaaat 540  
caat 544

<210> 10335

<211> 550

<212> DNA

<213> Homo sapiens

<400> 10335

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ggagtgcaat gacgtgatct tggtcactg caacctccgc ctcccagggt caatcaattc 120  
tcctgcctca gcctcccaag tagctgggat tataggcgcc cgccaccacg cccagctagt 180  
ttttttgtat ttttagtaga gatgaggttt caccatgttg gccaggctgg tctggaactc 240  
ctgacctcag gtgatccacc cgcctcggcc tcccaaagtg ctgggattat aggcggtgagc 300  
caccgtgccc gaccacagct gttttcttct accctaccac tggcgcttgc ctttgaaatc 360  
tttctggtgg gaagccaaga accctctcag gctaagctcc agtgtcgggg cttgcccacc 420  
ctacatcaag acccactaaa gtcagtggga ttctagagag cttaagtgt cctacgtaaa 480  
ggtacaaaaa atcaccgnga tgaccccaa tgtaactatc caaaagggga gacaggaagg 540  
ggtntaagct 550

<210> 10336

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10336

gctttctaaa gtggctttta tatcacacaa gcggctcttt ggtctacagt gagagaaaac 60  
agagggagcc aggaaaggct ccccgctggc ctctggagtc caggagcctt aggaaggctg 120  
aaagccagcc ctgaccagca ggcttagttg tcctgagaag agccagttag gccacctggt 180

ccagttcacc aggtttccca gggaagcaca ggcattctctg ggtcccccag cacagtgcc 240  
 gggaagacac ccccaatccc catctgaaca ggccgagggc agcatgggaa aggctcagac 300  
 tgcaggttca tcccgcagga tggtaaggac acgtgctcct ccctcgcaga gcaggctgtg 360  
 cacagcccgg cacagggcca gccagggcgg ccccttgccg tgtcagcgct taccangggg 420  
 aggagttcaa ccatcaggac cttttccaag tggatcttnt tggccagca caagccactt 480  
 gcactttgan ggcccgccag ggtcttgaac ttctgggtgc ttgagtagac aaccactggg 540  
 ggctcatcan gctccgntnt acc 563

<210> 10337

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10337

ataacgaaag gagatttatt tggtttacgg ttctgcagac tgnacaggaa gcacagtgcc 60  
 agcgtctgct tntgggtgagg gcttttaggtt aattccattt atggcagaag gagaagggga 120  
 gctggcatgt gcagagacca aatgacaaga aagagagagg gaagggagct tacaggtttt 180  
 tgtttttgaa agcaaaaaca aaaaacaaac aaacaaaaac ccaaccaaac aatagtactc 240  
 cttccactnt atgctaacgg aagactntn acaccagcca gttaaacaat gaaattntta 300  
 aacacncagc ctgctggggc tgcattgcaga gctaaaatgc aggtgtgctg acttcttgga 360  
 gctggagcag aggaaaacat naaaaagcat atctggaatc tatcacagct ttctttctta 420  
 agcaaataaa aatgcaaatt aggtttcata acccccatth caatttatca aactttttct 480  
 ggaagaaatt tcatttaatt atggattncc ttaccaggga ataaaacntt ttacaaacc 540  
 cttttnangg nttncg 556

<210> 10338

<211> 555

<212> DNA

<213> Homo sapiens

<400> 10338

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gggaaggaca tttttatatt ccctaattctt caggcaacct caccaagctg gaggtcacat   60
gtagctgagt gtgaaaccaa gaaaaatagc aagcttcaaa agtactgtgc gttgtatttt  120
ttcattctct ggcaggctgg gagtccaagg tcagtctagg caggagggtt gcttggccta  180
agcagtcaca caattttcac cgtcttgagc atatctgaca agacatacgt gtcattccaa  240
ccccccag gcttctcag ggtccgctcc aaagcctggg ctgtttctag gagctctggt  300
gtggcaagtt tttgctcagg gtgcagctga cagaacagga tctcattcac ttcaccctca  360
attcgccgga catataggag ggggaacact gccttgagcc cagccagcac tgagtctttt  420
agccccaagt ctggcacac aaggttgaga ataaaacacc ttcaggagtc aagatctttt  480
aacctttgta gaaaaaatg nttcccaa atgctggggccg acactaattc cagngttggg  540
ccctactggc aacat                                                    555

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<210> 10339

<211> 487

<212> DNA

<213> Homo sapiens

<400> 10339

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ggctgtgtgt tccgtttctt tattacctga gcccatccgg accctnaaga caactggagc   60
ccaccctgcc ctggaaggct canctccct gcttgaggac nccgcacacc tgttccagga  120
cgtgacacag gctntgggtc ttgggcgtcc tgcttgccaa ggagatctta agcttgtcga  180
ggtaggtgtg ctctggctc cagggttctt ggagcctnac gaggtcaggg gaacccttgt  240
anaactccac cagcagcatc atntcgtgaa ggatgtcatt ggtcaggaag ctgtcctgga  300
cgtaggccat ntncacatnc atggggatgc catagtcact gggcctttgc tcgggaggag  360
gcatnacca gaaaggcgag atcttggact cggggcctgg gttgccaaaa tagtaaaggg  420
gagcananca gggccaaggc anggcttga aaccatttgn tgnaccctg aaancncaac  480
ttggtaa                                                    487

```



<210> 10340

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10340

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acagagttta caaataagca gttttathtt caaaagtaca tagtaagtcc agactgggct 60
attgccaaag aactaatctt tagtctactt caacatgtta catggtattc ctgactctac 120
agactatcag catctgtgga ggtagctcc taaaggtccc aaagaacagg aaacatgcag 180
gaataaagga ctcctcatga agagcaggtg ggagcgagtg ggcaggcctg tatctttctca 240
gcaaagtaag gattgagtat agagagctgt ttgtcttaac tgggcttccc tgaagaatct 300
gagccaaact ggaagaaacc agcctcattt ccagtgttga gatgttagct gtacagtggc 360
tgtacaactg cagagtttat ttatagaatt agaaataatt ttttaaaatt ttaaaagggt 420
ttgtgtaatc attaaccaga agatgatatt cacaaattct ggtaaaaaat ttgactcttc 480
actatcacca tatcaacnng gaaaccaggg ccatgccanc caggaggagac tgncttanct 540
gccattangg aagttgnccc 560
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<210> 10341

<211> 558

<212> DNA

<213> Homo sapiens

<400> 10341

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catgtacaaa gccaatcatt tatttagcac taaaatcaaa ttataaaaac aacaattcca 60
tcttaaaaca ggcattttta aagcatttct gtggttctaa gtttgcatca agacagccta 120
agtttgcatc tgcacaatct ggatacccaa atccctctat aatttccaaa gacaaagaca 180
atttttgcta gttgtgaggt gtcaggggga agcagtgatg ccctgcaaac agtctaattg 240
gcccaggga cctgttttct ttctcaacct gaggttgcac ccttgatctc caggaaaaga 300
gattagtgct tgcttaacca gggttcctagt aaatggtcag ggatcttcta tgcaataatg 360
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ttgcaaaagt tactgaagag gaaaaaaaaag cacaacggag gcttcttgcc catttacact 420  
 tgcaatgtta gattttgaaa acagggccct tcatagtcag cacccaagtc ctggactttc 480  
 agatgtaatg cangctggnt aacaagccct taatactaca ttggaatttc naacgacttc 540  
 ctggacagtt ttttaaan 558

<210> 10342

<211> 528

<212> DNA

<213> Homo sapiens

<400> 10342

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 acagagttga tgtcaagaca aataggtttg aagttataga tgataaatca ctttgtctta 120  
 ctgaaccttc ccttgattac gttagagagc atccctggta tgctcccagt tgaatcttaa 180  
 gcatgatgtg tgtccgggtg atataatcgt aattcctttc tgtaatcct cgttctctct 240  
 cttttttttc tttttcttct ttttctctgg actagcaatt gctgtgctgg tacatgggtc 300  
 ttcctcagaa agtggttctt ccttaatgtg tttcttttta ccccttttct tcttcttctt 360  
 cacagatgtt tcttcttctt ctgccacttt ttcttcttcc tcttcttcaa ctttaacttt 420  
 aatcttggct ttttnnggct ttcttttcaa gtaatttcat ccctctttat ctaccnggtn 480  
 ctaattttgc gtttttttaa acaggttggn angtgtngga gtcacca 528

<210> 10343

<211> 555

<212> DNA

<213> Homo sapiens

<400> 10343

aaatacaaat gttttattac gcaaaccaca tgtaggtccc aggctcagg gcttacccta 60  
 cagccccac tggtccttgg ctccaagcct gctccttgcc cttgccacc ctggaaagcc 120

aggatctcct atggagtgtg taggtgtcca cgagtgtacc ggtgtgcggg cctcctgggc 180  
 tgcaggcact caggcatggt ggacgattg agggaaagac aggtgttggg gagcggggtc 240  
 cccacctgcc caggctcagg agtcacaggg gtctgcacag tcctttctgc tgtggaacac 300  
 gtgatagatg ctggtcgggg ggaacatagc aacagcgccg agcagagagc ccacctggat 360  
 ggccacgccg gctgccagca atgccggccg gccccgccat gcagcaggga gctggctgca 420  
 ccttacgtag gagaacacgc caagacacag caccacacgac agcaccacg aaggaccacc 480  
 cccggcgang ggcccaccaa gggccggcaa gggcttaagg aatgcancgn catnanggaa 540  
 nccccacaan aaaac 555

<210> 10344

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10344

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 taacctctgc ctctcagggt taagtgattc tcatgcctca gcctcccaag tagctgggat 120  
 tacaggcacc tgccaccacg cctggctaatt ttttgtattt ttagtagaga tgaggtttca 180  
 ccatgttggc caggctgttc tcaaactcct cacctcagggt gatccgcctg cctcgacctc 240  
 ccaaagtctg ggattacagg cgtgagccat cgtgcctggc ccagcctttt cttaaatact 300  
 tccagagaca gggagctcag tgcttctaga gtccatctga ccagtgatcc gcatttggac 360  
 cacattagaa aaagtctgnc ttctttttcc tagggaaatt tgcctnccga acaagaaccc 420  
 gctgggtcaa gctttgaatg cnagtggctt gcgggcagcg cactggatta tctttcccga 480  
 atgacttntg aaacacttaa acgcccacac cctggatctt cctctgntag gctgccattt 540  
 aaagccagtt ttgagccntg 560

<210> 10345

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10345

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gaagcaataa aagcacagat ttattgaagc aaaagtatat tccacagagt gggagcaggc 60
taaagcaagc tgctcaagag cccagttgc aaaatctggg gtttaagtac cctttagggg 120
tttctattg gttacaccct atgcgccacc aatcggaggc cgaagtgaag gctcccagtc 180
tccagactct tattctccta gctcaaagaa atccactgat ttctctgtg gcactctcag 240
gttccatctt gacaacttcc tctaaatccc caggggaaga gttgtttaga gactcctgga 300
tgccctgagg gagcggctcc agagcttgct tccctcctct gttttcaca cggtccagcg 360
ataggcactg ttctctgaca atccttcttg gcactgttta tcgactgggtg gaggccctgg 420
gctatgttcc actttgggga aaacagtacc aganagagga gatagttcct gggctctaaa 480
ttgggttcta ggccctgaaa ggcatttnc catnagcccc aggacaagca tgnnccatt 540
catggggggc cttatt 556

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<210> 10346

<211> 543

<212> DNA

<213> Homo sapiens

<400> 10346

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gtgtagacta ctttctaata tttttatfff ttagcaccaa aaggagaaaa catattgtta 60
caaggctggg tatagtgtct caatggacac tgcaaagaac tacataaaag aagtctgtct 120
caagcagttc gtatttgagt cagtggtcag atggggcagt tgcgctcagc tgcagtcctt 180
gactccggaa aactgtgcc tctcaaata tctagagctc atccttggcg tacatgaggg 240
gcagttgttg ttctagtacc catttagccc atggctcttc aagccaattc aactgggaa 300
aaacacaccc tcacaagatg cctatccatt tgagttcata caggttttag tagctagaac 360
taaaaaacat ttttaaaatt atctaaaca attggaccaa aagaaaactt gccatactta 420
aacngnatat atggtcctt ttttggtga aagatcaagn ttgggctntt ngaccttacc 480
ggtactaagg ctnggaaatt gccgaaaag gttttttaac nttncatant ttaaggagcc 540

```

cat

543

<210> 10347

<211> 511

<212> DNA

<213> Homo sapiens

<400> 10347

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cctctatcag gttttgaggc ggggtgagcg ccgaggtagt gggggctggg agggtcgagc 180
cgtcaccttg ctgggtgttt tgtcctgggt gttgggctgg gaggggtggc ggccgctgga 240
ggtgaacagg gctgtcaaag cgttccgggc gttgattgcg caccggcggc tcacaggtcg 300
ggtggtgggg ctggggttct tggccgcttg natttctgca ggttctcaa gtggcccaag 360
gacttgcagt gggaaagctg tgcccctgaa ttgctngat agaacttgt gcanatccgg 420
agatatagcc catnacgggc ccaggaagtc ncaccatag cngaattggg gcttganggc 480
tccgagccct tcaattcttt ttgganaatn t 511
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<210> 10348

<211> 428

<212> DNA

<213> Homo sapiens

<400> 10348

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gaaactggaa taagtgttta ttttctatta ataaaaatga attgtgacaa aagtggactc 60
tggcttcccc tccccctcn cccccacccc tctgggataa aaattttcca gcattgccag 120
gagctttcag gnacacatta aagaataaaa ngaagttaan cngctggagt ataggatagt 180
atnnganttt caagatcacc caaagctgca ctaccgtccc aaagctgacc aagtagaata 240
aaaagaanag gaaaanaaag nacaacccat gcgcaaagat agacatttgc ttgatctgct 300
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ggctcagggc caaatgttta atttgcttct ccaaagncgn tcattttcaa aagcngattc 360  
 tgggaaactg atgccnctag nctaaaagcc cactggccat gggaggggca tnaatttccn 420  
 cttggcca 428

<210> 10349

<211> 546

<212> DNA

<213> Homo sapiens

<400> 10349

caagtttttag agaactaaat ttgcatttgt taaaatcaaa aagtaggaaa gatgttcttt 60  
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 acattctgtg ttgtactgta ttgttgttca ataggaatta gcttctgtca tttgctaaaa 180  
 gaatgagtag tggggaacag gatatgttgg aaatttcata acgggtaaca gaaccattct 240  
 cttgggtaaa ccataggcag gggcagctgt gctgtaacca tatggtgttc catagcctgg 300  
 agctatgtag ccaggagcag ctgtcgcccc aacaaaagct ccccttggtga gaagttcctc 360  
 ttcctctggc ccgaacagct tgggactgct gcagacacag ctggattcac aacgcccttt 420  
 gcctganggg ataatcttcc ttttcctaata aatttgcccc attnggggcc anaaaacagg 480  
 ttntccaagg agctttnaagc ttggacttgg cctttgccct tttttaatt ggacctggnn 540  
 cctttg 546

<210> 10350

<211> 551

<212> DNA

<213> Homo sapiens

<400> 10350

ctgagacaga gtctcactct gtgtcccagg ctggagtgcg gnggcataat ttcggctcac 60  
 tgcaacctcc acctcccgaa ttcaagcgat tctcgtgcct caggccccca agtagctggg 120

actataggca tgcacatca tgcccagcta atttttgtat tttagtagag acagggtttc 180  
 accatattgg ccaggatggt ctcgatcttt tgacctatga tccacctgcc tcggcctccc 240  
 aaangnctgg gattacaggc gtgagccacc atgcccggcc ccaggatatt cttctgtgca 300  
 aagtttagga aactccatgc acttntcaaa acatcagatg ctggggactg gcttatacaa 360  
 gaaatatgga gaacacatat aatagatttt agccatggct aaattttcag aattttaccc 420  
 gagaccgata agtggngaana aactccctga aagttggatt taaagtcana aaatctnttt 480  
 cggggggggg cgttctant attttgaana acnttttcaa atggctggca aaaggggcaa 540  
 tnccccctt c 551

<210> 10351

<211> 506

<212> DNA

<213> Homo sapiens

<400> 10351

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 tgttcctgct ttgagacctg tgaattcttg tgggacagtt ccactgacag cttgcgttcc 120  
 cgaggtacca gtcctcagtg acctcgggaa cccaaccac ttaggtccca aagccacaag 180  
 ggtgcccttt gtcttgctgg gaagctggct gagggcctgc cagggtgga ggaccagctc 240  
 tcccgcacag gggttcagggc ctctcccaga aaaaagaggt tttgaagtga aaaggcaacg 300  
 aggggccaga gggctcccca ggatgggtct tttggaggta agattttgat gccacaacg 360  
 catgcaaggc taagaccccc aacttagcca acgaagccca tggntcana aaggcttgaa 420  
 ctttgntnag gccgngncc agatgcatct ggacggttnt ccaataaaaa gccccagggt 480  
 ttgctacctg gtacctgctg ggctnt 506

<210> 10352

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10352

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ggatatggtg ttcccgattt atttgttttc aggaaacaga caattgcatt gtcatacatg   60
acttagaact gcttacttaa atgcacatta ttagattaga ttaagtttct cttacaaaaa  120
cacaaccatg tcatttaagg cgaaaaatct cagcttctag ggagacaagt taatatttat  180
gatatttcct ctatctgatt tagtgaaatg atccattaat atagttagcc aggtttcatc  240
atccttacag ttttgctttg caaatggcat gagaattggc caatttgtgc ctgatttcct  300
cctctctagt agacttattt tacttgcaaa ttaagaactt cagaatcact gaatcaatgg  360
gaggtgagaa aggcacctta gaacagatca ggacttaaaa actcaataaa ggtattttta  420
acaaaacttg caatctacaa atattaatta agtgacaaaa tgcaacatgt agatcagact  480
tgcaaaattt tttaggtnac ctatccangg gatatttgca ntaagtntag cttggacaac  540
ctcntggt                                     548

```

<210> 10353

<211> 366

<212> DNA

<213> Homo sapiens

<400> 10353

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gagacagttt cgctcttggt gctcaggctg gagcacacag gcacgatctc cactcactgc   60
aacctccgcc tcccgggttc aaacgattct gctgcctcag cctcccgagt agctgggata  120
acaggcgccc gccaccacgc ctggccaatt tttttttagt ttttagtana gacaaggttt  180
caccatgttg gccangccgg tctngaactc ccgatctcag gcaatccgnc tgcctcagcc  240
tcccaaagtg ccgggattac aggcgtgagc caccacgccc ggctttattn tttnttttt  300
gagacagagn ctngntctgt cacccanact anagtgcaat ggtgcatct cagctcactg  360
caacct                                     366

```

<210> 10354

<211> 504



<212> DNA

<213> Homo sapiens

<400> 10354

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ctcaaaaaca atgtttatTT taacacataa aatgtaccat ctagcaccaa tgcctgtaaa   60
taccagaatt ccatccggtt actactcttt ggaacaagta tgattaaagt ccttgacaga  120
ttattgtata tgagcgaatg gcttcataac ataaaacaga gagacacaga acagaaattc  180
atttggtata tacatataga actacatttg tagttattca aaaacctttc actgcttcat  240
gtaaacaata ccagtatTTT taagccagat tttcctggaa catatacata aagtgcataga  300
gccacgtaag tgcataagcc tgaaactggt ctttctattc tcaactcatg ctcaaatgaa  360
aaatctgtaa agatatcttt tggttcctcc aatcttctga ttggcttccT tagcaactca  420
ttacagnncc aatttacctg attaaaatcc catngacatg gtatggtngg aggaaaaaga  480
aaacctttgg ccaatttnan nttt                                           504

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<210> 10355

<211> 545

<212> DNA

<213> Homo sapiens

<400> 10355

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gaatgaaaac catgaattta atngacatt gggggagcct catccttccc tttttaccac   60
ccacccatcc agcctgttgn gagttgggtg agggctgccc ccagtctccg tcttgcggnT  120
ntgggtgccA tctgtttcct ttgagctcag tcagcctcct gggctcgtct ntntgngaatt  180
ctccttcttg cgtattcata tagngcttgc ttgcgctcct gcaggctntc ctgccggggc  240
caggaanact tggcaaatgt tagggctgtt ggctgagggg tcaccggggc anagctggga  300
aactgaggng atcacaatgt canagggctt gcggagtcac catcattaaa cacgcatcga  360
atgccttgga ggcanaggct gtgggtaggg actgagttcc cttggngatg tcttcaggca  420
tgaaagctac ggccccctca acagattaat gatagcaagt ctacacaagc cagtcttggc  480
cagggcTntt tgggtgaccc aanggccatg ggggnaaant tncctgactt tttgagccna  540

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angtg

545

<210> 10356

<211> 557

<212> DNA

<213> Homo sapiens

<400> 10356

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accatggaaa aacatctgga ttccatttgg tagtttaaag gtttttgaaa atgttgatat   60
acacaagctg tacttggagc tggataacag acataggagc tggatgacag acatactttt  120
attcttttat ttttgagatg gagtttact gtcaccagc ctggagtgcg atggagcgat  180
cttggctcac tgcaatcctg cttgggtgac agagcgagac tttgtctcaa aaaaaattct  240
tttaattaaa aaaaaaaaaa agctttacta cttcctgtgg agttcataaa aagttcttcc  300
ctttgtttta gtcattccaga gtaaagtcac agggctcaaa gtctttccgg aagcggcgag  360
ccagggtctc ctcgcttcc tgcctgatctg acactggctn cagtcagact tatcaggaac  420
attaaggatg gcttcactgg ccaggacctc ccttccaact gcaanggaaa atccttttaa  480
atctggggaa aagctttctc cggggcaagt cacnttaaaa aatgccgntc cngctggcaa  540
tcggttgatg naaangg                                     557
    
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<210> 10357

<211> 540

<212> DNA

<213> Homo sapiens

<400> 10357

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gagatggagt ctcactctgt tgcccaggct ggagtgcaat ggcatgatct gggctcactg   60
caagctccgc ctcccgggtt cagccattc tctgacctna gcctcctgag cagctgggac  120
tacaggtgcc caccaccagc cccggctaatt ttttgtatt tttagtaaaa atggggcttn  180
accatattag ccaggatggt ctngatctcc tgacctcgtg atctgccgcg ctcggcctnc  240
    
```

caaagtgctg ggattacagg catgaaccac cgcgcccgcac atgcttggtg atgnttagta 300  
 aacagcacag tcaggttacc aggtagcttt aaggagagag tccactccaa aaaccggtgt 360  
 tggcaggatc cccgtcctgc atttcctaac ccactcgtgg tctaccccca gcctttaaag 420  
 tatggccttc tgaaaacctg accctgggaa gctgggaacc tnaatttggg caaatccaat 480  
 ggaatnacct gatgcncana atttaactta tccaaagggg aacttatggt taaagccctn 540

<210> 10358

<211> 416

<212> DNA

<213> Homo sapiens

<400> 10358

gagaaaacca tttttattat cattaccacc cagcttatct gtgctggatt atgtaccaaa 60  
 tggccagatc ttctaaagaa catctacata acatttcttt catgtttcaa gagatgaaaa 120  
 taactgtaca aggttaagta caaaagtaca caagacagcg gacacgaaaa aatccatgta 180  
 tgagatttta tccccacctg cagcttttat atatttgaaa agtagaattc atgaactaaa 240  
 aaatattatc cttctatagt cctgtcaagt ttaatggaag tgggtttaac ctgattacaa 300  
 cactaacacc agtatcactg atctgatatt tacaaaaatt tggatttttc aataaattaa 360  
 agtcaatgca acacccatgc aagctagagt gctanctggt tngnngaaca nggncn 416

<210> 10359

<211> 564

<212> DNA

<213> Homo sapiens

<400> 10359

cttgtttcaa gtccaattta tttcacacaa cacacaggct gctgaggga tccacctgca 60  
 ctgcactcag ttgaacttcc ggcccagtgc cgcgtcagag actaaacat gggagaaaagt 120  
 tcacaccctg gcctgggcca cccaccttca gctctctcct gtgcgtcagg acgcacgctg 180

gccccaaagag cttcactcaa cacggctggg tcctgggcgg acgtgggcac agcacttgcc 240  
 aggcgccccct ggcaggggct cttctcagtc ctccgcaccg ctctcctctc cgctgtcttc 300  
 gtcgtcgacc ccaccctcgg cgcctcaac ctctcactg tcctcttcgg agtccgtctc 360  
 ctccagccac tccagagttt ctgggtccat ctccaccaag gccttcacg cctcatcctg 420  
 tgcangtcca ggcagtgcag gtcgttaagg tganctggcg gcggccggct tnaaaatgcc 480  
 ccatagacta gagcacccat tgcttaaaag cagcatggcn tggacctgga cacggcccag 540  
 tgcnggnttc cggcttntna aggt 564

<210> 10360

<211> 481

<212> DNA

<213> Homo sapiens

<400> 10360

ctaatttccc tttaatttgt agatttaacc acagaactgt ctcgattttt ataaaaattg 60  
 atcccaagat ccaccttctg ccgtggctgc cacagtccag gctgagcttt tcctcctgag 120  
 ccacacacgt gtgttcccgt ccagcccaa ggggagaggt gtggggcggt ggggcgggga 180  
 ggcgcttgt gctgtggcac tggacacggt gctcatctgc aggatagcca cgaaggcaaa 240  
 cggcacagac gaagacaaca caagacacac gagcctggc ttccatcctc aggactaaaa 300  
 ctgcgtgag agcaattcac ataatctctg agaaacggct tccttacttg tgcgcagcgt 360  
 gagccgttac atcttgggct tgcaggttcg gntccaacgc agcangcatn caatctgggt 420  
 gggttttcgn gtggatgaat tccagttcca cgaaantcca ngattaggac aacttnttca 480  
 a 481

<210> 10361

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10361

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gaaggagtta attacatgta ttgattaatg gatagggtaa acagacgaaa atcaataaac 60
ctgagccagg ctgccccaga gtgctcccat gcctgggctc tgtctgctaa gagggtcaga 120
ggcagtcttt cctggtcagt gccaggatga agccagtcct gggccagggt gctcaggcct 180
ccagatggat tgccctgggt ggtgacatca gcatgggcta cagatcagtc ctaggatccc 240
gctcatcact cgctatcggc ctcggcctca ctgcctgtgc ctgcccagcc atatgggtgc 300
aatggcctgc ctgagaggag aggatactgg ggagggggag aaggcctggc acagtactgg 360
ggaagatgga agcagcaaac aaggctgtga acacagccag gatcaagcca gtgganccag 420
tgcaaacaca catgctcana tganggtggt ctcttggaaac ttttttccaa gtaaaaccgg 480
taaagaggaa gggcttaagt cnanggctgg aacctgccct taanaccatt tttggtacan 540
ttgnccaatg ccnggggctn 560
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<210> 10362

<211> 534

<212> DNA

<213> Homo sapiens

<400> 10362

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ccattaagga gaacatgaat ttccttggag gtgaggctcc aggtaggac agggcctgggt 60
ctgctgaagg ccacaggaag caaatggccc ccagtcacc tttctgtccc tgccatgaag 120
ggccattaca ctgggggtggg gaggtcctca ggagggtgtc acacatagcc ttaggcaata 180
gcaagtcttt cctattcagc tctgtccagc ctccaattga ggagggataa tgggggtgag 240
acagggttgg ggggtgaagtg gccaccaaac ccggcaaaag tgagcagctc catcttgtct 300
gaagttaaca tcatccctc aggtataaag cctctcctna catcgacttt ggtaaaccag 360
tcagtacag gccttggcca agctganact tggcaaaaac ctgaaccaag tgcccnccgg 420
aaagccataa tectancttt tgnccctcca atgcttaaaa gtcacaatgt tccccatggg 480
catccctttt cctgaatcng ctntnngtgt gaaaccnggc cagcccgggg ccta 534
```

<210> 10363

<211> 454

<212> DNA

<213> Homo sapiens

<400> 10363

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ccagtgaag acaatatata tatatttga ggtagaaata attacaaaa tactgacatt 60
tctaaagcat tagcatatit gttacaaaca atcaccaact aatccccatt cagaaaactg 120
ctttgtaaaa tgattattca acatcttcag aactacatat ttgtggcttc ttttttga 180
tttcacgtgt gagtatttgg agaattcagt tagtggcaaa aagttgtcca tactatgaga 240
aatgtaatat ggaaattata aaaagttata aatgttcata aaccccatgg tcatcataat 300
gtaaatgtcc ttgagtgcac caagttgata tttcctcacc aattgagagt tcacagttct 360
tatttcacag gccattgat gtttttagta atgtggctat atctgctggc atactccctt 420
natnaccttc atctactgna gncatatccn gnnc 454
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<210> 10364

<211> 587

<212> DNA

<213> Homo sapiens

<400> 10364

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cttttttttt tttcgatgag caaactgaac ttttaatttgc ttacctgaaa ggcttgctct 60
tcattattgg cataggccac agctatttac acagaatcat tgtacaggat ttacagcaag 120
atgctacaca tagcatcatt ctggataagc gacaaaggag taagaacaga ctggggaata 180
aagctctgaa atcaaagtgt aagcagaaat ctgaaggtag gtgtacaagg aaggataagg 240
gccaaatgat gagcgagggtt ggtgaggtag acataaggga ggaagaggaa acatccaaca 300
acttgtggtg cagagatata aggggaagagt cacttggcac atagtcttaa aaattatgtt 360
tgaggtttga aggaggaaaa atctgccata agccacctct gtgagaaaaa agaaggcagt 420
tagaacctta caggccaaac cttatacctc cctatcaaaa gtaatctgct gattaatcct 480
ggataggana atgagaaggt tgaaaaagaa agagaggaga tgcttgancc cgnaccttaa 540
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ccggagttag agacccaagg aaatttnttc aggaaaggnc ccaggaa

587

<210> 10365

<211> 587

<212> DNA

<213> Homo sapiens

<400> 10365

aaccttagtt taggtaaatt taatgactgt aaaagctgtt cacatagcag ctttaaagag 60  
 acacgttttc cactgacata aagttgcttc gccccttgca gcttatctcc accttcacga 120  
 cctgtttcct cagtggcagg caatgtctcc ctttcctgtt ggggaggatt gcccaggtca 180  
 gctctgaggc catcctctca ggtagcaat atgcagaaga gtccctcaga gtggtcctgc 240  
 agagaacatg tcccttaagt gtctgagaac tggctgaggt gatcttcacc agcacatagt 300  
 ccccaggctg ggctctgacc ctgagcccag gggtattgac atcctccatc tctgcatcag 360  
 ggaagatcac ctttaaggttt ccattcattcc tgccacacag gtcaagtggc agaaccgttt 420  
 actgagccct tccactagca ccacttggtt acaagcccac aagaaggtct gattgggctt 480  
 ttggtgcttc ttctcggaag atagtgatga agttccttca aacgcttaaa ttttancctt 540  
 tccgggaaaa ttattcttta gncctttgan atgncccn gn ntttttg 587

<210> 10366

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10366

gtcgtgaga atattttattc aaaaacaggg attgaaaaaa ctgtacagag tgtctgctgc 60  
 tgagaactgg gcccctgccc catgccactc cccagctac ctggcagtgc cccctctttg 120  
 ggggtgcccc tgacaagccc agccagtcca ttccagtcaa aagggtatca gtggaagcag 180  
 caagaaatct gcagggtggtg gggagagaag cctggcccca gctaccaaac gggccctcct 240

ccctgactcc cacaaggatg cagtaggcca ggaagcccta agggatgggg agtgcgtgag 300  
 tgacacccgc catggtgggg gcactaggga gtctcctggc tgctccctgt atccaagcac 360  
 agagctgagg aggtagggcc ccctgccctg gggcttgccg aacttnagac ccctgggcca 420  
 naactgnccc actctgagag aaagactcca taaatggagc caggtanggg gtgcatcatg 480  
 cgtntggccn taccgcgttt ggacccangt ggagnttctt ggccggtagg tgcaaagnaa 540  
 ncccctgt 548

<210> 10367

<211> 574

<212> DNA

<213> Homo sapiens

<400> 10367

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 tgtaaagcac tccattcaat aaaagcacat aagtccccct caataattag tatgacaatt 120  
 cagatacag ctcttactct gggagagttt attttaccct ttattccaaa aggcacaaaag 180  
 tcatctgagg cctcagatat taaccccaact gcatgttaat gacacaccac tgaggtgcag 240  
 ctcaatgtaa ttattaaagc ttataacaca cttccccaaag aatttataga ttcttttctat 300  
 aaataataat ttaaaaaata ctgcacctta agaccaatac aggcTTaaca aaagacctga 360  
 aatttctgca agggcagttt tgtttcttga tagaagtaca acttttgaaa gtctattccc 420  
 agcaaaagaa acactagacc cagcttggcc aaagaaacaa aataaaacag gtgatttcta 480  
 acacgctaaa ggagtccatt tcatcagctt ccaagaaagc agtctgggca ttcagaaagg 540  
 ttctatgatc caccagctgn aggcattaga aatn 574

<210> 10368

<211> 570

<212> DNA

<213> Homo sapiens



<400> 10368

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cagggaggag accactttta ttgcttgtct ggggtggatgg ggcaggaggg gctgagggcc 60
tgtcccagac aataaagggtg ccctcagcgg atgtgggcca tgcaccaag gaagggggtc 120
ttcatgcagc cgggtgcagag ctggtccatc cagaggggtg cctcgtgctg cagcggcgta 180
cggcgtgggt agaaggtgaa gtccacgcgg tagttgagca ggcagctgag ggaggccatg 240
tagaggtcag agaagcgcac gaggcgcctt gagaagtagg tggggttggtg gaagggtgcgg 300
aagatgctgc cgaactgcgc attgaacagg gccttgggtga tgcacctcag ctccctgccgc 360
tctttcatcc aggcagccag cacctgcctc gactccgcgt cctgataggt ctgcatgcgc 420
tccagcagcc ccgtgagcgc ctgctgccac gtcagcnagt gcatgtactg ctccgtgttg 480
ataatccgga tctnaccttc aactngggga taatggccct gtccccaacc tgcccgaaca 540
tgaaatccgc nnaacacttt tnaagnggcc 570
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<210> 10369

<211> 566

<212> DNA

<213> Homo sapiens

<400> 10369

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aattacgcat tttaaataac aatatgtgca tttgttttta cagttataaa tttttttctc 60
acctgtttta gacaacagct tgtaatagtt ttgaatccat taagatgttg ctttcaattt 120
gaaatatatt gtgtatacat gtatataaaa aataacccaa tgtatgactc atctgaccga 180
tgtttaagat caataacggc ttatttttca acatgcagtt aggaagagag ggaagcaagc 240
caacctctct acagtatctt tttgctggct tgtttttgta gtggtatcaa tagtggtttt 300
tggagggaac catgtgcctt cagcctatct agtcaagatc agataccacg atcaacaaga 360
gcggtagaag agatggggaa aggggagtg gtaagtgtta aatatcaatt ttgtaaagtg 420
tgcattttgg actccttcta ggcacaggat taaaaacagg nccatgagga aaaattggta 480
taattaggaa aaactggaat caaatcaggc ctaatagccg aattaaggtc ttttaatagn 540
tgnctatntg gaggttaacc tncctt 566
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<210> 10370

<211> 518

<212> DNA

<213> Homo sapiens

<400> 10370

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gggaaatgat gttcttctgg acgtataaat aaccatcagg tggccaattc tcatccagag 60
tggacagggt ggaatgggat catccctgct ttcaaataagg gacattgacg tacagagaga 120
ggagtgggtt agctggggcc ccagggcaca gcttcaccac cctggggagg tctggggaga 180
gcatcctgtc cttcaggaca cccccacca gcggctggag gtgagcacgc catgagtcgc 240
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agccgggtca agaccagctc tgaggcctga atcaagctgt gctgcangat gtgcacgccc 420
ttcagggaga ccacggnaag cttctgcacc catcccggtc angtccacgt gagccatggn 480
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<210> 10371

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10371

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tggccctggg agcctaaagg gcagtgagga gaaggcttag caagaggcct ggagcagggg 180
aagtcaggtc cctcaggaac cctcctccc ccagaggaag gaggaagagg gctggagagt 240
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ttactccttg cccttctcag gggcagtggg ctcccagagc cacttggtag tccccagggg 360
ctcagtccca gggtcagcc cgtgactccc ctaagggcc ctcgcccttc aagtccagct 420

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nctcaaaaga ngagccgttg cacctgactc cttgaactgn gctcgctgcg gtgtancgta 480  
 tnccancacg gttgtcgccc cagtgcacatg tggaactgaa gctnccggtg cangnttact 540  
 tcaactaca 549

<210> 10372

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10372

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 ctgttttggg ggaaccctga aattggagtt gactgtgaac atggaacaaa gtcttgacta 180  
 ttttcaaaat tatattctga atctgattga aaatgagggtg ttggagagca tgttcttgaa 240  
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 gaaagtgatc tcagtgaaaa atcagactct gaagggtgac tttctgccaa agatgttccc 360  
 cattttaaca aaatatcctg tgatTTTTTg gtaatctcag ttgcaatgcc atttcttttag 420  
 caatatcatc aaagagatca gcagaggcat catagctacc ttcataaccc atagaatact 480  
 ctgggggtacc ntggtaatgg atatgtcccc angcattctt caatggattn gacttctatt 540  
 tggactatgc naaaagttct n 561

<210> 10373

<211> 574

<212> DNA

<213> Homo sapiens

<400> 10373

atttaaagac aatagagggg tgtagtatta tgacaaaact agttccctca aaaactgaac 60  
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cctcaggata tgggtgttgat tctgacggta acctgcagcc aaatgtcaag ggccataggc 180  
 tgaatgcctg gggagctctt ccaggggtaa agaatcctct tgggcctggg cccctccagg 240  
 cagccaagat agggcagagg cagagagatg gcccagacct ggccaaatgg gttctatatg 300  
 agccgccttt caataaagac ctgggctgtg atgaccccag ccgtgttctg tgccacagcg 360  
 ggcggagtgc tcacaagtgg gtcctcgggc catgtgagac cccactgagt aactgaaca 420  
 acacgccatc aagcaggttc catctgacac ttgncitggg cccacaagcc aagcttcagn 480  
 ancatcgnaa cctttgccgg acaaaagccc agggtcctt tagttcatct ggatgnttga 540  
 gtcccccttc ttggcttnc ccggcccaca ctt 574

<210> 10374

<211> 575

<212> DNA

<213> Homo sapiens

<400> 10374

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 ggaagggaag cactgagaaa tggctggatg tggaacaaaa tctgcaaaca gctgatggac 180  
 tggatgacga ggcatgaagt ggagaggaga ggaaacaagg atggctcctg cgctctaagc 240  
 ctagacagcc gagttagcaa caacaaggct tcagctgaaa tggagaccct ggcaggtggg 300  
 gtgcaggtgg ggagctggat cagaagttct gatgtagaca cattaaacag gatgtgctat 360  
 tagacatcca agtggagaac ccgagtagac tggtagatat gtacctctgt agctcaaaag 420  
 ggaaggtgga atgtaataga tgcccatcnt tgggggttca ttgggccgtc aaaaacatgc 480  
 ctgaattggg gtanagacca acatcnttaa ggncatcctc tggcttccan ggaaggaaat 540  
 atttttccg gatttcttat tccncaatntt gacaa 575

<210> 10375

<211> 413

<212> DNA

<213> Homo sapiens

<400> 10375

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gcgggtcacc cgtgctgttt atttacgcag ctgtgttttc taacactaat acaatgcatg   60
catgtattgt gtgttacatg gtgaaacaga acagatcctg aagttacaca gatggcgtgt  120
gcatgggggt ggtgagcacc cgcattggcct ccgcaaaatg agtgccgctt aacaaacggc  180
cccaatgccc ggcagtcagg ctgggccttt cagggcacca gattcctcgt tccaggccaa  240
gtcagcgacg gctcggggaa gtctgctgcg gctaggagcc ctgagtgtcg gtgttgtcgc  300
tgcccgtggt gttctcccgg tcctcctccc cctgccggca tcctttctgc atcttcctga  360
gggcgcgctt cctgcggnag ttctcaaac tctcttngan ggnccnnncg ttc          413
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<210> 10376

<211> 519

<212> DNA

<213> Homo sapiens

<400> 10376

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gtcagcaag cagaggcagc gtttccttcc attcacaccg aggtggcctc ctgtggacac  120
ggggcctcac cgaggcgctg gcggctctgg ggtgcagctg tgggcggcct gccagctgct  180
tgaggcttca gggccttctt ccaggacatg ggggtggctg ccagccctct tcgctacgac  240
ccgcaggtgt ttgaaggccg ggggcagcct gcgccccagg aacggcgggg tggtcacgtc  300
gcggatcatg agcacgtact cccctaggtg tgctgccgca gcctgtcctt ccgtggctct  360
cccctcagcc tgctgcctcc aggaagctcc tgtgccctgg gtggggtccc ctggggtgca  420
agnccgcttt ggaatcttgc cgcttgctt cttggggaag gttgncagga accggaang  480
gngganccaa gccgggggcg gncccaggan gacaattgg          519
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<210> 10377

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10377

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gtttgattct aacaaaattt attatgcagt aattacaaag gttaaagact cttccatctc   60
aaataaaaat aacagttata attacacaca taatatagta cttatagaa tgattccaat  120
aaatatcaca ggaaatacag tgcattttca agttggagag acaataactt tctcattcac  180
agtgtttgac ataggaaagc ctatttacat aacaatctgt ataaagtcac gctcttagta  240
acagtctata cagagctgtg ccaacacaat tctttcagaa tgtgaagtac cgggcaaacc  300
actcctggcg ctggggatct ggagaagcca ctggagaagc ttcactctga gcaggactca  360
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caatatcgtg gactggagaa ttaggaatgg gatccaggcg gntaggatgt ccattggcca  480
cttcaccaga ttncagagca cttaaattgg gaacactcac aaacctgttg gtgggggatt  540
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<210> 10378

<211> 532

<212> DNA

<213> Homo sapiens

<400> 10378

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gcctttggaa gcccttcttt attgggaaat aaatacagag ttaaacaggn gggccggcca   60
acatctgngg ctttgaggag caaaaggaag gagtctgact tgctcanaac tcanatctcc  120
atgagctggt cattccccac gatcacctca ttcactcggt tagctttggc ttcaatcctn  180
tggccacttc caatcaagca gtccttgatg tctgcaccct tctcgatcac agcattgttg  240
canatgacac tgccttggat attgcttcct tctccacag ngactgagtt catganaagg  300
caattggtaa tagtcactct atcttttatg agacaggatg agccaatgac tgagcgctta  360
atggatgact tctctccaat ctgngtctct ggcccaatga ggccgtcaac tccaaccagg  420
tgtttgctga caatctgggc tgacnaatgg actggnnggt ctttgagag anagcanaca  480

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gcaatttggg cccctgctgg ttggttncat gtaaaagncc catgngctcc tc

532

<210> 10379

<211> 538

<212> DNA

<213> Homo sapiens

<400> 10379

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tagatgtgaa atggcaggac ttcacggccc cgtttgcata ttttcctact ccgcagacga 120  
ataatatattt caggggaaggc agcgcantct gtgccgtcac aatcgggcga ctgtgggtga 180  
tgagggatga tgattttcca ggaggccctg gggtcnagg actcctagag ggagtttcca 240  
gcccctcaat cgcagatgga tggcctgttg atgttgtaac tggggtggaa gttganccgg 300  
tcacaggagg tgatgcagtt atcggggcca gtcacgatgc ttttctccag gtaaacattg 360  
agagtattgt tccggaacat tccacccgag gcatctcntg cacggtgggg gctctgctcc 420  
cgtaagcctg gttactgggt cctgtcactg aaacagcctt ctgggtcctt gtaacccccg 480  
aaccacccng ggttggnatna accttgcccc gcanngtccg cgcttacgcc gnaagtna 538

<210> 10380

<211> 568

<212> DNA

<213> Homo sapiens

<400> 10380

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aaaaaaattt tgtcactgac caaacctcat aacctgaaaa gaaccaagaa aagaaattcc 120  
cattatactt gtacttctaa aagggttag aggtctaaac tagacttcgt tgcaatccag 180  
aaagttaaag gactaaaaaa ctggagaaat agagttaaga attagattta tcagacagca 240  
tagtctatgc tgagatagca aaatagacat ggctttattt gctgattgag aagtgggtcca 300

gccgtgggct agcagtcatt tacatatcag tgaccaaatg caaacatacc cgtactaaca 360  
 gtgcttttgt ccatgacata cccttttgac agcccaaagc tgaaacgtca actctatctg 420  
 gggttacttg cttatacaaa ggatgttact ctagcaattg gtgcttgagg gcaaganccg 480  
 atgattgnca ctagtaggga agaaagcnga agtggatgca acttacactg gatagtcctt 540  
 anccttctgg gattaatgga aaaggtgn 568

<210> 10381

<211> 403

<212> DNA

<213> Homo sapiens

<400> 10381

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 cagcctgggt tttgtcttga aaaatcttct ccaactcagc tctntgttct gccaattntt 180  
 tctgaaactg gttttgnaaa tcctccattt ctgattgatg ctttgcanac agttntttgc 240  
 gtaaattttc taaacataaa tctttttcaa attcccaatc ttccttcagg gtctttacta 300  
 tctgggcgtt tttctccatt tctgattgna acttctcctt nagctcagct gagcaccacc 360  
 tntccttctt ccngngcgtg ctgntccctg aggagctcca gnt 403

<210> 10382

<211> 564

<212> DNA

<213> Homo sapiens

<400> 10382

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 ctgcatttag ctccaaacgt ttttgtgacg tgaagtggag acaagcccag gtttggacct 120  
 ttgcacctta ctatcaggtc cagcggctgc accattcagc cttgtaactt aatttgcac 180



tgctgagact gtggcagccc cactgcaagt gactcagttt tcttgtagtg atagtaagta 240  
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 gaagtacaag aggggtgcccc aggggtacatg ggaatgctcg cggtgcctga gactctgggg 360  
 tggagagacc ccagtgggggt tccaatccct caaaaggatg cagcttaaga ggggacctaa 420  
 aagaaactta agcttgaagt ttctgagatg tagcatcatt tctcttcctt ctacactcat 480  
 tctgncaggc tctttctttt tacacactgg cccctnttta aagaacccat caagccagg 540  
 ccctgcanac agaccggacc gcct 564

<210> 10383

<211> 511

<212> DNA

<213> Homo sapiens

<400> 10383

gtaaaacttt cccaagacat tticagactt aaaaataaag tcagtgttac aggtgctggt 60  
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 gatgtctgtc aagacattcc ccctccccta aactcagtag cagttgaggà tgacatttca 180  
 ggctagagag acccaaaata cctctgttcc acctgagagc aaggtggaag ttgcatcagc 240  
 tactgcccc aagttagcttc atcttctgat tgtgggcttt ggaggaacga gagaactggc 300  
 tcttggccac tgtgaggggt acagctttgc cactcaaata taccttattg nggcattcag 360  
 ggagccaggg tccagagctg cagggctgcg gtccctggct cactttcaca taggccatca 420  
 cataacctgn cataaaggca tnaaaaccag cccggtgcaa tccatcccag gcactgggnt 480  
 angactggct tggttcctgg nacttntgan g 511

<210> 10384

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10384

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cagaaatggc tatccacacc tgacacaggt cccacccac ctcacaccct ggaggcagca	180
gcataagccc cagttttccac tatggtgtct cctcaatgac cagaataccc gccagttcca	240
ggggtcagca attccattct ctctctggct cagttcagaa gctgtgatgg tcctgttaga	300
gagcactgcc tgcaggtcaa aacctggaag aggctctccc aggccaggcg acaacccttc	360
aggtgcagac ggggaacaaa aggcttaacc tgtgataatc ccaacacctt ctgaaaaaag	420
agtaacagtc atccagcaac gggccatggg taggggcagg ccgtaacaag ggacactgcc	480
cctggctcac atgtcctgtg canaagggtg gcacagatat angctcgctt ttaaggatct	540
ggtggacctt ttttaanctg gcn	563

<210> 10385

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10385

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ttttgcaagc ataaacactc aggttactaa taacatttgg gtgggtctaa cagttatgag	180
cagatgagcc atattttataa agaaattggg cataaaggga aaggtataaa tgcatatcac	240
tttggttggt aattgtgtat acccagcttt ttaactctgg tcacttgaaa tactgtgccc	300
aacaacctca agtcttttga tgagattgat ggaaactgtg ctgggtcacc actgcatatg	360
cagtcaccca aagagctgag atctcaagaa attttatctt tcacaaatgc agatgtacga	420
aaaggatatc tcatttatcg aggaagtttc aacattttat gtcacactca atgcttatac	480
acaaagtcag tattnggata atgcactttc atggagtcag attctgatat ccagcngcag	540
aanccnnaga ggtccgtttg	560

<210> 10386

<211> 413

<212> DNA

<213> Homo sapiens

<400> 10386

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ggagtgcagt ggcgcgatct cggtcacca caacttccgc ctcccggctt caagagattc 120
tcctgccttg ggccgagcac ggtggctcac gcccgtaatc ccagcacttt gggaagccga 180
ggcgggtgga tcacctgacg tcaggagtac aagaccagcc tggccaacgt ggtgaaaccc 240
gtctctatta aaaatacaaa aactagccgg gcatgggtggc ggatgcctgn aatcccagcc 300
actcgagagg ctgaggcagg agaattgctt gaacccggga agcgggggtt gccgngagcc 360
gagatcgngc cactgcattc cagcctgggc aacangagng aaactncgnc ccn 413
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<210> 10387

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10387

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tgtcagagta tctaaaaatg tgcctggaa gacagggtgt ggtggttgcc ctaacagaga 480
gttacagggt aatgggggtg gctctttcag tacttaatcc gntggttttc aaaaaccctt 540
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gnacctgggg nccctggacc

560

<210> 10388

<211> 564

<212> DNA

<213> Homo sapiens

<400> 10388

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taaaattaat tataaataaa gacatttcag cacataaacc aacaagtctt ttctagattt	180
ttaataccag gacctaacag catcattttc caagtaagtg acaataact aatgtgaaaa	240
ccatatttaa tatagatgat gtcacaaatg acaatgtggt tttccatagt aaagaaatac	300
gttaattttc ttaaactcta ttggtatta caaaataaat ttactggtc aaaaaacaac	360
caaaaaaac caggaaaaca gacatgatgg aaaggttgat aaaatatatt aataacttaa	420
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aagcaaagag ttggcagaat acagtagaag agctattctg aaacaaatga agagtcagaa	540
cnttaaacng gggccaggat tttt	564

<210> 10389

<211> 414

<212> DNA

<213> Homo sapiens

<400> 10389

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tgcataatata acttttccat ttaacatgtg caagcataaa cgacaatgat ctacgtttta	120
taattcatca gggtcagagc aattgaccaa tgtctgttta ctgctaggct taccaacagt	180
aaattacaga tgaattagtg tccttttgct tctcttctct gactctcttt gtccagagac	240

attttgtcgt aaagtttcag tgcagctcac ctccagccaa aggtaatctt tttagatcag 300  
tactcagttg ctctgaattt tgcttataat tataacctat ttaatcacag aagaaccct 360  
gcanaggtgg agttcaaggt tgcatacaat aacngganna tcncagnitt gnag 414

<210> 10390

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10390

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aaataacaga tataaattct aggaagaaaa cctatttgag gctttggaga tttacaaaa 180  
atagattttg aagaggagtc aacacctgga gcaagtgatt tggtttttgc agtttttccc 240  
tggaggcagc tgcaatgggtg gtggtgttgg cacaaggact gggggagggc aggcagcaaa 300  
aactcttgcc atctttctga ctggaggaaa ctgggggaaa gagcctggaa aaaccatagg 360  
tgctagagaa tgatgcagat gccaagaaa gaagacagcc ngaagangac aaccccagat 420  
tctatgttta acctcagccc aagtcnttgg ctgctcctga accatgtatg ttggggcaat 480  
ctgaaancgc tttaaactca ggttaaagaa cctgaattgn gtctatgccc tgctctacag 540  
gcatggcan 549

<210> 10391

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10391

gggtgtgggg ctgtgttca tttttggtac gagtaaagcag gcagcacctg tcaactggtgc 60  
actatttaca aagcctcttc aataaataat ttagagagaa tcctaccga atggctctaa 120

catttgtaca tgaatattgt acatgattaa aaataaataa ggcaatataa tacagttttc 180  
ccacaaataa aaaggaagtt gtttttcacc aaacccaag ggacattatg gctaaacaca 240  
gttcctgaac tcccaggaag tggctggggt ttggagtgc tgatgatgga gatgtttgcc 300  
cctgaagtgg agaccttgcc aagtctgcca tggggtcctt tccagaacag tcgtgagccc 360  
agagaaggca gcatgggtccc cgcgacggct tcctctcact gccctacaag tggccacacc 420  
ttgggcaagc ttncangatg tcatgtgtga ccttccggtt ctgtggaccc caagcacaga 480  
tggcgtggct ggctctcttc taatcttaca ggccaaacca ngggtcctgg actggcttca 540  
ctcacgcct 549

<210> 10392

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10392

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ttttagtaca tgggctactg aaacaagcag agtccactt cttaaacttc ctcttcctta 180  
cacgtaaaaa gccaccagt caaggtcttt taattttggt gtacactatc actgaatgcc 240  
attataaat tctaatttta aagagaccct taattttcaa aggaggactt tgatagcatt 300  
agttttcaga aaagatgact tgcaattcta acttagtact tgaaaggatga gatttttata 360  
ggggaggctt ataaaaggng tcttanaaaa aaaatgagcg ctctcaaacc tttcttttgg 420  
gaatgaagggt gtggggctta agtgactttt tnaaaggga acaactgacc ttncggngg 480  
agaagcccc tatgcgaact gtggccaacc gcaaaggatg gttctgngca cattcctggt 540  
aancaancg 549

<210> 10393

<211> 452

<212> DNA

<213> Homo sapiens

<400> 10393

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cgcgactgag acgaaacgac acacaccttt acttaatgga aggcttcgct tacatcctga 60
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gttactagtg ataggaggct tagtgaagcg cgtgatgtga acggccacgc tgcaaggctg 180
gagagaagag aggagggagt gaagttgcac cctgatcgcg aatcctcggc cttttatcag 240
gggcgccgcc actcggggtc cgaccattcg cctccaacga ggggacagcg aatctgctgt 300
cgtgtgcagt ccacagcaac cacaggtggg gcaacaggag gagcgcttgg gcacgaccac 360
gtgaccagc acgagccacc gcccgcccca aaatgaaatc aaatcctaata ctcccaatcc 420
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<210> 10394

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10394

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gcatatataa ataacattta ttaacttagg ctgtacaata tattgattta gtcaaataaa 60
aaataccgta cacaaaaatt gaagtaaaat ctgtaagatg ccattcagac tgaattttat 120
attctgaata agacaaggga ctgccattca cttaaagcaa aatggctcca attccgttta 180
tctatctatc tatctatcta tctatctatc tatctatcta tccatctatc tatctatcta 240
tctataagtc tcgctctgtc acccaggctg gagtatctat ctatttattt atgagataag 300
tctcgctctg tcacccaggc tggagtgcgg tgggtgcaatc tcggctcact gcaacctctg 360
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gcaccatcac acctggctaa ttttgatttt ttagtagaga tggggttcac catgttggcc 480
agctggctctc gagcttctga cctcangggg atccaccac cttggcctnc caaagggtg 540
ggatacag 548

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<210> 10395

<211> 551

<212> DNA

<213> Homo sapiens

<400> 10395

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cctaggacag ctgggcctga gctgggcggg caggggattc catctcctgg gtgcgcctgc 180
cagaggggag aggctggagg cggcgggaat gctgttctcc cccaggagtc agtcctcagg 240
gcttctgccg tgggacgtgg ggccgaggga cctggggcac tgaccaggtc ggggtcgggg 300
gcagcatctg cattggtgag gccgggtgaa aagggtctgt ggtgccggac agcttctggt 360
gctgggcctn acggagacag aggaccagan gtncaggttc ctgggggctg agcttttctc 420
agactttgga ggaaaaatgt ccaacccaac angcaattgc ccggggcang ggccagtgtg 480
tcanaagcgt naaactcttt cgccgngnga tgtggtaccg gtgccggggg ctcaggaatc 540
gaaggcggga n 551

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<210> 10396

<211> 544

<212> DNA

<213> Homo sapiens

<400> 10396

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aagatatgac acatttatca tccataatca aacaattcaa atccctgact gaaattggct 60
tgaaaaatga taaaactct atggctgctt taaaggactg taagataaca tgtttttaaa 120
gcctatataa accactgatg cacttttata tactttatat taaaactaa tctatggagc 180
tcattccatt ccatttaaaa tagtaagtcc tcacatattt gtggttactt ttacagtgtt 240
tttaaaaaag gagtactgct aataatttaa gacatcctaa agacagaata ggtgtgaagg 300
cttcttttta tatttggggg gtttaggta atttttaaga acttaaaatt attatttggt 360

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cctccttaat atgaaactct tccaaaatac ctctgacca gtaagtaa at ggtccttang 420  
 cactgtgagg tggattaatg atgaacatga acccaggctg agaaagtgtc caattggatt 480  
 taactactgg caaacagtta caagctctgc ttatccctga cacnggaaag nctttacccc 540  
 ctcc 544

<210> 10397

<211> 538

<212> DNA

<213> Homo sapiens

<400> 10397

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 tatgcatgga ggtggggggg gggctatgaa tcattcctgt gttctcaggc ccaggatcat 180  
 gaagtcacga ggttgaatgt agcagagtct gtctcttctt tcaaggctca taacaatgcc 240  
 gcttctctca ggaagcctcc ctgtcttctc cagagacagc tgtggtctcc tgctctgggc 300  
 ttcccaggcc aagttcccag ggtccctctc tgtgctccag ctgtgaccac agaggagtct 360  
 atgcctgaaa ataaaggccc ttctgggatt ctagccatgt ctaggcacag aggaggggaa 420  
 ggggaagttt tgcagaatga ataaatgaaa aagctgggtc tcctttgaat taaatgtgga 480  
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<210> 10398

<211> 546

<212> DNA

<213> Homo sapiens

<400> 10398

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aactggtttg tattggtggg aaaatcccag gtactgcttt tactactgtg atttgttgcc 180  
 agcatttata acttgggagt aaggctaaat ttcagtttca ttgctgaaaa taaagatgta 240  
 acattttctt ccatcaagtt catggttacc cctggcttct atccaggta agaatccctg 300  
 cctttaggga aaattctgga cataatcagg acactcctga agaggtttaa agaagaggta 360  
 agacctcact caagaattcc cactgcagta cagacagact ttcattgntt ctttccttgg 420  
 tgncttcang gttgttgcaa atccctcctc aaggcttggg tggccaggcc tcgntgatga 480  
 aatgatattt tgnaaaccag gtcatnaaca agttccggtt tncgtgcatt gaccanttct 540  
 gaggtg 546

<210> 10399

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10399

caggaatate cctagctgct ttcatatcgg ctttgatctg ctactgggtg acctgacagc 60  
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 tgtacctctt tcgaagtgga gtcttgccct ttcacttac tgacaattct ctggactgca 180  
 ctgactctcc agttttttct tcacgttcag agtaacgccg agtaccgttc ttaggaatcc 240  
 agacttcttg gagttctaga ctatcttctt catcatcact ctctgaatca tgaacagtaa 300  
 ttgaggttgg ttttactaca cgctgaagac cactgggtcc tgcttggtcc tcatcaacat 360  
 ccacaggaat aattgccttg ctgtgagctg gagtattatt tccactctcg gccaccacct 420  
 ctccatcttc ttggacgaag gtcttccatc tcatttaatg cgtcaactgc aaactgntgn 480  
 tctctggctg caaacttgcc naaggcanc tcttggtga gcatctggat aagggnatgt 540  
 ggccnggan 549

<210> 10400

<211> 140

<212> DNA

<213> Homo sapiens

<400> 10400

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gaacatgacc tgttgccctt tatttaaaaa ctgttactag ccctgcctgg ggctcctata 60
caaaaacaaa acacaaccta aaataaggtt tcttcctgac ccagagact ggggaggggt 120
agggaggggtg gggnnnnnnn 140
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<210> 10401

<211> 502

<212> DNA

<213> Homo sapiens

<400> 10401

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gggcaatata agaagtgacc atagggcatt ttaccactgc cccatgtgca atgcctcgat 60
ggcattccaa ttcattttct gtcactgcca tgaagttaca ctcttcacag cagtagtacc 120
ttttatcttt ttcattgggt ttagcatgtt gcacaaatgt ttagggcaa ttggtaccaa 180
acacacactg aggacactgt aatcgtgcac ttcttccttc atcctgaagt tctttcaatt 240
cacgaatttc ctccatcaac ttctgtcttc tctcctggng aataatcata tgtttttagaa 300
gtgaattgcg atctcgaaat gtcccgtcca cattctctac aagcatatgg ccttgggaca 360
ttaagatggc gaaagtgact attcccatct aaatgatnca tcatatgcc tgtnggaagg 420
tgcttcttct tccctaaaat tacaattgna cttttgntnc agggggtaaa aatgantggc 480
tctttcgggt acttgnaagg an 502
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<210> 10402

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10402

ggcttaagca catgttgata atcagcagac gtgtaaggta gggctcaagc ctactcccca 60  
 aacccgctta actcctaaca ctgctcttcc tctacagatg acctaactgc ttctttcagc 120  
 tcctggctgg cccctctttg aaatcccttg ttccgcagct cggagtagaa gtcgactccc 180  
 tcagagacag agtggatggg ctgattatga tactgggtgg agctgggtcaa aggacccacg 240  
 gtgggggctg cacttgacag ccgccgaggg aaacactgat ggtgatgtgg taggcagttc 300  
 gggttttcct tgaagctctt actatgcttg cacttgaact ccagcaccat cctgggtgtac 360  
 gtgttgaagg tggtagacag ccgacgccat gcagcaggtg aaggagaacc aaggccatgt 420  
 agaangccca gcccataatt ncaaacatgn ggctccaagt cttttggacc caagttgaca 480  
 gtcgtttgga aaaacttggg aatncttcat gcggccaanc atttcccang anaacctgcc 540  
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<210> 10403

<211> 541

<212> DNA

<213> Homo sapiens

<400> 10403

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 cacctttctt atagcagtga attttcaggt cacatacaat cagtaattta tactccaaat 180  
 acaacaatca cgtttgtatt aatcatccag tacaattcac aggttcctat tacacaggtg 240  
 gatgtactta gagagtttta gcacaaaagc tgatacaaat atgaaagtgt gctcagtcga 300  
 atggttagtg aggtgctaca ggtgagtgtc ggcgatgggt atcctcctga gctccacgat 360  
 ctgggagtca gtcaaggtgc cccctcctg gctgccttga ccagattcat tactactgac 420  
 actgagacca gcaccagttt ttaatgcaaa tattaaatca tcaacttctg ggcttctcat 480  
 cggntatcaa gtgaccctgg gcatatcctc caaagacggg accgggggtc cnttttgggg 540  
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<210> 10404

<211> 522

<212> DNA

<213> Homo sapiens

<400> 10404

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canggcaaaa aaagatattt tattttaaaa acatgtttgt gggttttttt cctttttgca 60
ttcagtacat tgtcattcag acatcacaat actatataca gatncacaac attttttaaa 120
aaaaagccta ttcctgatga acatttcaaa agaacactgt tttgtaatgc accagtggga 180
agggaagagg caaggggccc ccacagcacc aaggnggcct ttgaggaggg aactgttagg 240
cagcatctac atttagctaa ttgagggccca natcttcttg cctcttgaac tagatcctct 300
agctttcctc tggaaatcag taaaggtgaa agtgtgagga gtcattcctg ggctagtgcc 360
ctgatggaaa ggtgactgga cagggatattt gttgaggac ccactctcca tccccttgga 420
agaaaatgtt tatecttaga aaaaagttct gnttctggac ctggactaat ncccaacctt 480
accccctaga gagaganaaa nganaagang ganccctttt ta 522
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<210> 10405

<211> 453

<212> DNA

<213> Homo sapiens

<400> 10405

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gaggcacctg tgggacttta ttagataaac acacaccagc tccagccaca ggcttggacc 60
ggccagctga caggggcgcc tcagacaccc ctgccgggtt ccgtggcccc tggccatggc 120
tggaagcagg gttcaggccg cccacttct gtctagtcct ggcaggcccc ccctcacctg 180
gctctgctgt gggagccgag aacaaagacc ccgcctgccc cactccttct gccccagggg 240
ctcagccagc acccacctn acagtggcct gggcaggggc tggggtacaa agcctnacc 300
tcccctgtg agccagacgg aaaatgcac tcccaagagt gtctcgagg gcaggaagga 360
ggcctgcccc tccctagcca gtgcctacaa caggggggtgc cctggggggc anaacggccg 420
accgncacca canganatcc tggggnanan aag 453
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<210> 10406

<211> 523

<212> DNA

<213> Homo sapiens

<400> 10406

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agcattcctt tatttttagaa gttcacacct ataattttat aacaatcgtg aaaatgttac   60
tcagaactag atgttttgat gacacatagc agaaatctgt ggttcaagat ggtcattgca  120
aacttaacca atctcagcat tctattctgc cttttgtttt gattgcacag aatcaatata  180
attctgattc atatggaaaa taacttaata tcttaacctc cgctcaggat cttcatcata  240
aatgtaggtc agtacatacc taaaaattgt caatgatcca acatggtcac atgtgacatg  300
ctacacttgc acctagtagc aaacaagctg atacttcaat gagatctggt tggcatatac  360
acccaagcct tgtctgtccc ctgagagcac tgcacacaga tagtgaaaga acttgtgtca  420
ataagaaatt cacagggatg aagctgggcc cagtgtctna cgctgnaat ccagcacttt  480
cagaaggccg aancaggngg atcacttgan ggncaggagn ttc                               523

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<210> 10407

<211> 553

<212> DNA

<213> Homo sapiens

<400> 10407

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aaaacaaaaa aacttcattt atatacagtc agatataaag acatctcttt gactcctgtg   60
catatatttc ctcaactcaa gattagggca taaaagtcag gctgctatgc cagacatgct  120
ctgccctatg gcagggccaa ggagaggatt gtcacttgaa agtgggaaca cttaaattga  180
tgacagacaa cactggaccc acagaccaag agcattcttc taagccctgg agtagctcga  240
ggaatggaag agggaaattg gaagcagggt cccttttcga tcttcatgtg aagagaccca  300
gcctcttcaa gggatatcaa gataaacttc cgttccccaa gcccaccaat ccctgtccag  360

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ttcctttgct tcctgccctc ccaaatagga cattctcctt tgtgcccagc ccccttttgc 420  
 acagatcctt caaggggagt cccatgatcc acaagggcag agacctttat agcanaaggc 480  
 anggcaggta cacactatct ctncctatgc atgggtgggc actgctgang gnccttggtc 540  
 angaaatccc aaa 553

<210> 10408

<211> 286

<212> DNA

<213> Homo sapiens

<400> 10408

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 caggctgaag gaaggctgag gaaaccagta tgaaggcagc tcaaataatg aactaaatat 120  
 attccaaagg tactatttat acttaaggca gttttaaaag tgaggtctta accaaaaagc 180  
 ctttacatgg cattcaaaac aaaaacaaaa acaaaaaaaaa cacggggggg gggggggcact 240  
 taaatntntt ggattgnctn aaagagctna attatgnacc cnaaat 286

<210> 10409

<211> 508

<212> DNA

<213> Homo sapiens

<400> 10409

cctccggtag agatggggtc tccctatgtt gtccagactg gtttcaaact cctgagctca 60  
 atgatcttcc tgcctcggcc tcccaaagtg ctgggatttc aggtgtgagc caccatcccc 120  
 ggaccttttc ttttcaaaac atacataaaa atggaaatga ataggaccag ccagtggctg 180  
 tgatgcagcc aaaacgccct gtctggaaag catgcgtcta ggtaatcttc ctccgctttg 240  
 ccaggcggtc tgaggtctgg gctggaggca gcgggaggga cagggtgccc agtttgtgat 300  
 cttcttcact gccggcggcc acagacaccc ttcttttggga gatcttcagc ctcatggctt 360

tggtatctc catcatcctt ttctcactga gcttcaagtc cctctgtaac actgtcaggt 420  
caatttggaa gtcatgtatg tgcaaggcaa gntgatcac atatgcngna atcttcgcct 480  
tnatagaatc cnaaaattaa ntcccnaa 508

<210> 10410

<211> 540

<212> DNA

<213> Homo sapiens

<400> 10410

atacagcatt ttccattggt gctgcttta gctttgtatt gtcattgctcc attgtagatt 60  
cagaaagatg aacctgatta tctgacacac attctgtttg attaagcaaa ccaggtgggt 120  
tattttctaa gactacaatg ccttcaacag attcctcagt atttttctcc ggctcagatc 180  
tcattaaggg cttagacctt ttattccctg tttgttcagc tttaccagct ctccggcttg 240  
atctcttagt tccattcact attttttcag aatcagattt tgaaaaagtc ccttctcttt 300  
gctttgcttt tggtagaaaa tctgttttaa tcatggtttc ctggttattt ttcactgtaa 360  
cagttgatga aatattattc aagggggatg gactaaaagg tctattttct gaaccatcaa 420  
acttctccaa agtaataaag gtttgccctc gacttggttag ggtatngggg gaagttccag 480  
caacaggtgg tattaggaaa ctggactact gntggcaacg aaggaatttc tggctagatg 540

<210> 10411

<211> 520

<212> DNA

<213> Homo sapiens

<400> 10411

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aatacttnat gtncctatga aataaaacag gtagggaata tgtccagngc aaacagagga 120  
ctcacacctg tgcntanaca gcaccatcca ctgattgtcg ctgcagtcca cggcggttact 180



aagcctgcgc cacccacgtg ctgccccagg aggcgctacc aggctnttcg ggccacaggc 240  
 ctttcctcca ctgcatgtgg cggcagggcg ggtaggctcg agggtccat gattgtgggg 300  
 cancttcaag ggcnatggg gcaaaggccc tcgaaggctc cctcctnagt aggggatgtc 360  
 attctgatag tactggatca tgttgtagt cggntcctg ttgctgagga agcagctntg 420  
 gatgaccttc atgatgaaat ttgcaacctn gggctcagtc atgttggggc taaacctgng 480  
 ctttaanaa cttgattgcn tggcccnnaa aaccgggcnt 520

<210> 10412

<211> 531

<212> DNA

<213> Homo sapiens

<400> 10412

aaaataaacc attcagtaga ttttattaac caaacaagc ctctgagat tggttctgtc 60  
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 ccagctgttt ccaggcctgg gactggagcc ctgctgagac cttgtccac atctaggacc 180  
 ctctagggcc tttgggcaca gacaagtagc aagggcctct gccaggaaca cctagaggat 240  
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 ggccagtttg catcccgggg atccctgaag agatcccagg aggggagtgc tttgtgcact 360  
 gaaggcgtgg aacagggcac tggaggagga agaccagag ccctggctct naagacaggc 420  
 ctggcttcaa gcacctggca tcctttccaa ggagaaggaa gcctgatgtc tggattccca 480  
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<210> 10413

<211> 458

<212> DNA

<213> Homo sapiens

<400> 10413

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 actctgtacc tgtaaaagga ggtatgCGgt gcttctaaag catgcactgc atccattcat 180  
 tcacgtggtc cactgggtga tgacggtctg tcctccccctt aagcaaaaac tggctctaag 240  
 ggacaggtct tttcttcacg caaaagggtga gcaatgcccc cagcctttca ttctagaaag 300  
 tgatgaggcg atgattttgt atccacaaaa tgcattatca aagctcacca ctttagtggt 360  
 catttactaa agttagcaga gatctagaat ttgaaaaaaa acagtttanc aatgngaaat 420  
 aactccnctt agcaaattca attaangnaa ctngntca 458

<210> 10414

<211> 533

<212> DNA

<213> Homo sapiens

<400> 10414

ctgttaagat actttatTTT ataatacaaaa tacgcaatac aaacaaatgg acataacaaa 60  
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 tgacttgtagc tgggtactct gaactttcaa ggaggccaga gcaggaaagg gaaaggaata 180  
 acccccacca cccccaacac aagagaggca caaattagag ggctgggcac aggctgtagc 240  
 cctgggtgag ggggtaagca gcttgacagt tgctctgtgg tctctgggat ataattctgc 300  
 ccaaggctag aaccacagag aagagtttgc actcttaagt ccaggaaggg gactacctgg 360  
 aaggcctgag aacaaaggag aaagtttagc acactaaaca catggccagg accctaggga 420  
 cacaaggcaa ctggagagtg ggatctcttg gtaaatggca tggtaggcag attanagtcc 480  
 tggctataat ccctanggcc ccaatcctag tagttacctg ctaccaacca ntn 533

<210> 10415

<211> 545

<212> DNA

<213> Homo sapiens

<400> 10415

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 ttccaccaat gccgttaaga tgccgccact tgggtgaggg gtcctccag gtactgcacc 180  
 aaagcctggg ccttggcctt gagcattcca aagcccacgg tctccttggc atacatacac 240  
 agcagaaggt tggccactcg ggtgatggct acacggccct ccatgcagtc catgaggatg 300  
 aatttgagat tgtcttcatt aaacgcttgg ttcccgttcc ggtcgtaggc ggcccagatg 360  
 ttactggcta tggcagcggt gaccggggcg tcagtgtccc cgtaaccaga gtaggccagc 420  
 agtgatccct cgttattcag cancaggggtg ctctggacgc cttcagtgtt ggcttggctt 480  
 aacacctggg tcaaancctt tgggccaaaa tgcctacggg tctnaacctn ggnnttttgc 540  
 cccaa 545

<210> 10416

<211> 401

<212> DNA

<213> Homo sapiens

<400> 10416

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 aaggtggggg ggcaccttta tgttgttcaa ggaccccaga gcacccccct cacgagagaa 120  
 taaatccaat ttanaactta caaggtggtg gggatgggaa gaggaaggga cacagtatgt 180  
 acagatgctt aaggggatgc tggagggcct tcagcaacag ggaatggagg tgccaaagag 240  
 gaagtcgggc agagtcagcc actgatctgg accccctcag cctcggccag agggtagatc 300  
 tcaatggctt ccaccagggg tagcgctcc acagcagtct ccatgacggc caggccaacg 360  
 gcagcctccg cctttgccan ctgntgcenn ananngcctg a 401

<210> 10417

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10417

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gtcaggaaaa tatctgatct gattcttccc agcttgcttc ccctacaact taataagccc   60
ttcactaacc cctgtatgta ttaactgcaa ttgcctagcc cggcatttac actctcaaaa  120
gatttaacgc aattacaatc aaaaaacact tgtcatatat aacacttttt cacatggaaa  180
taaattggtg gtttaagggt tacaattcct ttgaataaaa tttcagttat tagttacaaa  240
atgctaagac agattgaggt ctcaaagaaa gaacttgaga aaattatggt ttaaaggact  300
tcacaaatat gaagcataat tgtagaatac ctgatacaaa gtaacttttc ctaggtttta  360
ggttcaagtc tgaattcttg aattgtccag catcaacgag acctcattta tattcttttt  420
attttatcat tactttcaga ttcagggtct ctgctatatt tgccaagct ggactcctgg  480
gctcaatggg ancctcctgc ttaacctccg aanggttga ttnnaggctt gcccatggcc  540
cggggttaca aatt                                     554

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<210> 10418

<211> 543

<212> DNA

<213> Homo sapiens

<400> 10418

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ttagagtcac tttctggtat cgagcgacca caccgaggag cacaccctgc ttccaaggct  180
gctgccttct gcacacagtg ggggatcccc acccaccctg gctccccca agggtgcgt  240
gcacagtgcc cgctttccag ttacctgacc caccctgagt ccctattcca ttttgctcgg  300
ggctgacctc agacatgccc tgtggctcag ctctgccact actcagaaca ccagcctcag  360
cttcctatg tccccagat tcagcagccc aacanggatt gggggaaatg ctccacatca  420
ngtgggtngg tggncgtgggt ccctgnaaac tggactggct ttttaagcca tttcaggaa  480

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acactaacan aacaatggcc cttaanccca aggggatgcc aatttttccc tgggnnttttg 540  
gcc 543

<210> 10419

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10419

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acatattaac atgaaactac aatcactggc tgtaaaatat agtcaaatgc aatcaagctg 180  
aaaagaaaag gtggaaatct ccaggttatc tgcccagggtg gcaggaaatc gacagccccg 240  
agaacgcaag tgctgctgtg ccgccaggcc cagggtatg atccaaagtg acgggcagac 300  
taccggcctg caccaccca ctcaggctgc acacaagaca gccagcttag gatctccgtg 360  
ggctgctacc tatgtcacag agggctgatt aagggttgc agtgttccca aatagggcct 420  
ccaatgagan gagtggaaac tgcattacaa gaaattcact ggggctggac ttgactcttc 480  
acttggcgag tctnatgang cactngncct tcaatggctt ctggcantta atgcttccgg 540  
gcattanggg cctttt 556

<210> 10420

<211> 525

<212> DNA

<213> Homo sapiens

<400> 10420

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ctactacata ttagttttcc actactatca aaagaagcca aacgtaatct aaatgctatg 180

ctccttcgag gctgtaaact gacagatccg ctacatggct gattcagtgt attgcgtttg 240  
 aaaatgatgt atcgattggt gtaagttaca agtaggtcga agccgaagtt aaaacctgtc 300  
 caacgccagc agtattcacc atctttggca agctttctac cacacctcat gctgtttccc 360  
 tctagttctt ctttattgat ttcttgaggc cccacctcac tgcctgttc tgcccgagc 420  
 atagcaaacc actgntgggt atacncagaa gaaagccatt ctgaangnac tacagcatct 480  
 tggtaataa ttcttgcan aagccngatc ctggaatat attgg 525

<210> 10421

<211> 535

<212> DNA

<213> Homo sapiens

<400> 10421

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 agcaattaat gacctcccca aaatcacatt atcatcaaca agattttttt ctaaaagtta 180  
 cggccaatcc aataacaaaa aaattcacag ntattctgca nacattttaa agatgcagga 240  
 attgnattgc ncattatata attataaacc ataacaagca gttatatatt ttaatctagt 300  
 tttcacaaa atttacatta tcatgcaata cttcactgnc acagaatgat ggaactagaa 360  
 caggttaact tacaacttt taattatagc cccaaattta gaattatttt aaaggtatat 420  
 ttcaaattat tatnctaaaa aaacnctcca ggggaataaa acnggnccca tcataatttg 480  
 gtcccaggac aaaatacctt ttttaggggg ctctttggct tggccttctt ttcct 535

<210> 10422

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10422

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aacaggcttt tagggaactg gacacacaga ccagctgtga ccctgacttt cacattgatg 180  
ggtgaatggc aagtaggagg taatgaaatc tggaaatgac aggggagaga aggcaaagct 240  
gcctggagtg tcagtcctcg aggcatctgc ccctctcccc cgggggccag ccagggactt 300  
cccagttcag gaaggccaca acacttgttg cacattaatt ccgagcttgg cccggcttct 360  
ttcctgtgcc ctctgcctct gtgggcaggg gaaggaggaa ggtgtgtgtc ccttaggatc 420  
tccaagtgt cttccagctt ccaggagcan ggctgagatc ccagagtcag tgccatgaac 480  
tgtgcatttc actgagggaa aagggangtg tggnttttgg actttgcatt tcacacanaa 540  
cccccttg 548

<210> 10423

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10423

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aaacgttaag cacttctcaa gtaacatgat gtggaattac actttttgct cttacctctt 180  
ttaggtacac acgtattatt caacaaagca aaactatatt acagtgtctg ttaacaaaaa 240  
gttctctatt agatagaaga aactacagta tcctgaagct atttcccaa gagctagttt 300  
agtagataga cctttgggcc catcttattt ttcttctttt ttttttttc agtaaggtaa 360  
ctttccatta tgcacatact ataccatcat cattcattgg gtggagatta gctgggaagt 420  
agctgnatat ttttagggga gacactgatg gcatggactc tggatcgtgc tgtgcttatg 480  
ggtaaacata tctaattggga aattcgaatt acatncanag cttccggatc aaagnccgac 540  
attttcaa 548

<210> 10424

<211> 548

<212> DNA

<213> Homo sapiens

<400> 10424

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acacaataaa tatttttatt tttaaact gaattgtaca tctttcatat aaaacatgag   60
attctagcct gttttaaaaa ataagtatac ttgctagtag tatcttcact cttttttttt  120
ttcagaagcc aatgtttctt aaatctgcag cttcattcca cagctttaca gaatcataat  180
ctcttgaata tatttccaat gttattaaaa aataaaaaat catacaagat atatttagca  240
cattaaaact taagagggtta cagtataact gtccagacct ccaggtagca ctgaatactt  300
ttccagtaca aagaggccaa tatgttagaa taattaattc tctgtattta cttttattaa  360
aaagagggtt ttggtagtaa gaacaaataa tctctcattt gttgcctgaa atcctaaaat  420
aggatcattg gtttctaggc ttgctacttg ctgcttagca acctgtccta cttgcctggc  480
cttccttctg tggaaagtac agtggacatg ggagcaggct gacgatngat gaatactcga  540
cgaaagggn                                     548
    
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<210> 10425

<211> 557

<212> DNA

<213> Homo sapiens

<400> 10425

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atgctctttt ttggttcta aaactgatgt ggtttcattt ggagttctct tcttttcatt   60
aaccacatca ccgtctgctt ctcttgcttc tagtagtgat aaactatttt gctctttatg  120
gataaattca ttcattctct ttgtaacct tttgttttgc tgcttttctt ctccatctg  180
tttatcatgt aatagctgct gttctttttc ttttctccaa aaagcttctt gtttttgccg  240
gattcgatgc cgtaattctt catcatcagt gtcagatgac tcagatcctc tgtcactcct  300
ctcatcttca ctgtctcctg atccataacc acccagtcca ccgagtccag tgagggaagc  360
cagtgcactg gactgtgccg gctgttttgc aggagctttc gttgctttgc ggtgtgcatc  420
    
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tttggtacg taataaaatt tcttcatctg gggacatcca gcagaaattc tggtaaaagc 480  
 attttggcag cacatcattg gatactcttc tcccttaagc atcttaaggg cactgggctc 540  
 ttcttgagga actggga 557

<210> 10426

<211> 562

<212> DNA

<213> Homo sapiens

<400> 10426

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 actggctcag gctggggctc acagaggcca ctgcacatca gctccaggct gcaggagcca 180  
 ccacctggcc atactggctt cctccctgac gcagcacagc tgtgcctggg acacagagtc 240  
 gctctcaagt actggagcag ctagcaagct cactccccac tctcctcact tatctctgtg 300  
 acaatgtcta tcaggctctg gagcccgaag atatagccag catcctggcc ctcatgcacc 360  
 acggtgtcct cgccatacag cctgcagggtg gtgtgtgcaa agtcgatcat gcgcacatct 420  
 acagagctgg cgcccgatgg gtttgtaggc ataggcacca gcagactcat cagctggatt 480  
 cctctgacan gnccttccaa tccttaacat tctgagtcca ggaaccactt tngggccggt 540  
 ccttggcatt atnaaangac cn 562

<210> 10427

<211> 554

<212> DNA

<213> Homo sapiens

<400> 10427

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 gcaacctccg cctccgaggc tcaagcgatc ctccacctc agtctcctga gtagctggga 120

ccacaggtgt gtgccaccat gcctggctaa tttttgtatt cttgggagag acagggtttt 180  
gccatgttgt ccaggttgt cttgaactcc tgagctcaag cgatctgcct gcctcagccc 240  
cccaaagtgc tgggattaca ggtgagagcc attgcacctg gcctaacaac ttgtatatct 300  
aagaatagcc tgaaaataat gtcagcatgg gctgtacttc cccaatttta ggaaaggaaa 360  
gaggaactaa aattctatct cagatatgag cctctgaatt tcaaaaaaaaa attgggagaa 420  
aatagacaac aacaagacaa aaaataatac actttgacct ttgggcttgg ttagctttc 480  
ctggaaataa gggngctttc tctttgnaat cagatgacaa tgggaanagc tgactggggg 540  
tnggaactgg ttan 554

<210> 10428

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10428

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cgtacaaaaa atagcgacgt ctacagggcc cctgatgggg ctagaagggt acagtgcctc 120  
ccaccctcac cccttgtaga aaaataaact ctcacgccta tggaccagca aagactggca 180  
gagtggctcc tcaacaggga cacaacactt ctctgccagc ccagggaccc cgttctttga 240  
ccctcacctc tgccacttct aaggcactgt gactcccttg ggctgggttg gtaccgccag 300  
cccaccctcc tacgcccgcc ggccttcca cctctggtcc gcctggggct gggatatggg 360  
tcccacgtg cccctgctg gcttctctac ccaactacct ctagcgctcc ccgctccgg 420  
cggggtaaag ctactaagc taatcgcccc tganggcca ctaccgtnt ggccccccag 480  
cctggctttt ccgggtcttg acaagcccgg aagccttctt cccttctgca aagactggaa 540  
ggggctttct gaaggg 556

<210> 10429

<211> 562

<212> DNA

<213> Homo sapiens

<400> 10429

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aaaggaaggc ccaacataaa ctgagaaatt gaatagatac atccataatc cctttctatt 120
ctaattccata cacaaatatt ttatcataat ggtttttagaa gtgaatatta tttctatatt 180
cttttccac acttttact atatatcata gacactttcc taaaattcat aaaatcttca 240
catgtaacaa cagcaagtgc tgtaaggaa agattacaag ctatctaatt ggaagatcat 300
gtagtaaaat gatgcactaa aatatggttt tccagcctaa gttctaaaca ctacagcaac 360
ctttaaattt tctcaataag cccactagt gtagcattcc atttactctt tatggaaaaa 420
gangtctaac actggcagtt ggcttttggc atatgaattt ctctgaatca aggctgaagt 480
gctttttgca nggaaaaggg cccgatttaa taatttcata gggaaatggg cttagaatc 540
aggnttacca tgggtntggg at 562

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<210> 10430

<211> 559

<212> DNA

<213> Homo sapiens

<400> 10430

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cactttccca ctttttatta ttcaacacat ggaagggggt ggagacacaa ggatagggca 60
atggtgagtt tcaataaata agagaaacag gatggacagg cagtgggccc atgcctgcac 120
ggccccacat aaataaccag gttgctgagc cagagtggaa gtcagggctg ggcctggcag 180
ccgcctgcac tgcccagaag cactggcacc acaggacac agaaaccact gaggcccaag 240
gtgtgctcca gccccacaa gtcttctccc taaagctcct gagatcttgg ggctggctgg 300
gcaggctagg gctctgtatc acagtctgc tgggatcaag tctatTTTTT cagtttcatt 360
aaaaacagct gggggagggg caggcacatg cattaagccc cttccgtagg cagagccatg 420
gatggacaag ccccatgggg gcctttgaag gcanaagccc tggaagcaca aaaacggggc 480
ttggataaag cttctaattg gaagggatgg tanagcccaa nttcccaatc cccaaaacca 540

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anccagaanc tncaaagag

559

<210> 10431

<211> 533

<212> DNA

<213> Homo sapiens

<400> 10431

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gaagcattac ataataaatg gatactgtaa	aaagatctga ttagttaaaa gtaacaagca	120
ttaacagata gatacataca aaactcagcc	tgatcagact gggtgtgagc ctgtaatggg	180
gcatggggca ccagccttcc caaggggtag	cctcaaggag ggaggggaaa gggggggtaa	240
aaagaccaca agaccaataa aaaaaatcag	ataattagac acagattaac tgtaaacagt	300
tctctctctc tccagtgaac aaaaagaata	agcttccaat gccaaactcca tadcagaatg	360
acttccaccg ctggcttgtc ctgctgccat	actcgcgggc tcatgtgggt ggcaggcaga	420
ccccaaggag ccatcacggg caanggctgg	agttggatta cgtcagatct gggngngtgg	480
tgtgtgtnaa aaaatatgtg gggngaactg	ggnttgaagg ggntttcttt tgg	533

<210> 10432

<211> 556

<212> DNA

<213> Homo sapiens

<400> 10432

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ttttaagctt gaaaaagcct ttcaaaagat	ctaatacaga atttccaaaa accagtacga	120
cttgcaagac attctgtgga aaaaagtttt	gtgaccaaac agatttgga actgtcacag	180
gtaatgctat tctccttcca gatttccaca	gcaccgggca tattagaagc tctgagaagt	240
tttgccataa agatacactc taaccatgtg	tttcctttta aggaggaaac tagaaaggag	300

gtgacacatt gaggtcacac agagtaccac atctgtcaaa ggaaagatca acaggcaatg 360  
 tcaaatttta aggagaatgt gactcaagga agttcttgaa ggacaatata tataaaaaatg 420  
 taattattca accgtaagca gaattatggt cagtaagccc cttaccaatg ctactacaaa 480  
 atggaatgaa ctattatctt aataattctt taaaccccgt tttttaaatg gtaaccccaa 540  
 ggggccaaaa cctgnn 556

<210> 10433

<211> 562

<212> DNA

<213> Homo sapiens

<400> 10433

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 agatgatact cacaagtaaa gaaaatttac aagaaaaaac ttaacaaaag tttcaataaa 120  
 agtattgcaa cattcaaact tgacttataa caaaagaaac aagattgcaa acaaaaatgt 180  
 ttacgggggtt tccaacata aataaatgaa atagtgttta ggagtaggg ctcagtctga 240  
 tggctagcag gaagttaaca gagtgtaact tacctggaaa aaatctttaa tgtacaaata 300  
 acaagcccaa attatggact gcagcaattt aatcatcact gccatttttc ttacttccaa 360  
 aataaagcct tgattaaacc attcataccc tatattactc atacctttac ttcagagatt 420  
 gaggaactat atacaacaaa ttaatttatt ttcacatag ggataacata ctgnacctct 480  
 ctgccaatgg tacttgaaaa tcttccatgt caaaacaact tgacagtaga tntaaccatt 540  
 caataaatat gccatggacn tt 562

<210> 10434

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10434

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 tgtttgaaag catgaatctg cagtctggtt gcctggggtt tgaatcctag ctctataatt 180  
 gctaggttat cctgaggaag tcacttgccc tcatagggtt gtgaggattg ttagatcaaa 240  
 ttatcaagaa tacttaaaat atgactggtg aggtggtgag gtcaaactct agccctgcct 300  
 gagcatgcat atactatact gctcccacct gcccttggac tgccttccat atctaaaatg 360  
 nattcattct tcagattcca gctggcttgn ctactgccc ctgaggaacc cctgctttca 420  
 acaactaatc aagnggatag actttatggt cctctcttnt agcaatgacc ancttccctg 480  
 cntngaggca tacaagcctt tcctttttta ncctccggac atacccccca atttgnccct 540  
 tccaccttcc tanaatangc 560

<210> 10435

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10435

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 aatcaagaac attaggaaaa tttttttgca aaaatgtcaa aaaaaaagat ttgatctggt 180  
 cgggtatagt ggctcacacc tgtaatcca gcactttggg aggccaaggc gggtggatca 240  
 cctgagggtca ggagttcaag actagtctag ccaacttggg gaaaccccat ctctacaaa 300  
 aatacaaaaa ttagccaggt atggtggtgt gtgcctgttaa tcccagctac tagggaggct 360  
 gagccacgag aatcgcttga acctgtgagg tggaggttgc agtgagcccg agatcgacc 420  
 actgcagccc agcctgggcg acagagtaag actcatctca agagaaaaaa aaaaaggatt 480  
 tgatccaacc caganttcng aaaaacaaa cccaaaaccc tgggactngg tacattatta 540  
 aatnngggac nccgnnaaaa c 561

<210> 10436

<211> 574

<212> DNA

<213> Homo sapiens

<400> 10436

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gattttgagg ctcagttaat atttcaaaat tgtaaccgta gcaaaactgc attggtatTT 60
agaaaaataa aaaatttcca atatgtatgt ctgtgttata cctgcctctg ccatgcagca 120
tcatagcctg tgggaaccag gagggttcc cttaccaccc agagcagagg aggaaggtga 180
tggaatatgg ggtgagggga ggaacctggt ggccccctccc tgagatggcc agaaagccct 240
tggcctcacc tgggactgac caggcagccc tagtctaggc acaaggtgcc ctttcaccct 300
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cccaaacttg ggccaaatgt tgcccaaact tgggccaaaa atgttgccca agagaccnaa 420
ancagaggaa aacaggttcc aaatctatgg agatcatgag cngaaatctt gangctttga 480
ataaagggtc taaaagggca ggaactcttt gggngggcca aancanacgc ccattcccaa 540
gggctttcat tggaatgggg ggnaaggctt gttnn 574

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<210> 10437

<211> 562

<212> DNA

<213> Homo sapiens

<400> 10437

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atgtcctTTT ataaaaggaa cacagcatct gtggatttag gtatgcttag ggggtctgga 180
accaatcccc tgcatatggt taggggataa ccatattcaa aagaaacatc ttaaggcttt 240
accatgtgtt tgcattcatg aggcttatct cctatgtgat ttctttcacg tttctgaaat 300
gaaataaaat taatgaatgc tttccacat ttatagagta tctctccagt gagtccTTTT 360
atgtctatgc aaggaaactga gagaactcag tgccttccca cattccttac attcatgcat 420

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cttctcttca gtggtgagtt tttcatgtcc tcgaaggaaa ccgagaacca ntggaagctt 480  
tancncattg gtgacattca taagaattcn tttccagggg gaatcnttca tggccccaaa 540  
aggcaanggn cccaaaaaaa gc 562

<210> 10438

<211> 552

<212> DNA

<213> Homo sapiens

<400> 10438

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tgcccccat taactctctc tccagaaggt gacaatgtta gtgaactcaa gactctcact 120  
gatgatggta ttttacaatg aaaacacaag gaaacccttt gaggtccaat tttcacatca 180  
tattctccaa atagtaaaat agcagctcta catgttgatg aaaagaaatt tcaatttctt 240  
cctatttgtt tttactcata tcaacattaa tatgtatctg gatttattaa tttccaaaaa 300  
gaaaatttta gttaccaa atttcagaaa ttttaataaag cattacatat atgtaattag 360  
cacttatcta ccaaaaaaac atatgtgtat gtatttattt atcttacctt cactgaagtt 420  
cttttttctg gctggacatg agaaacagga ttaagtgatc aatgctggct ttatttcttc 480  
ataagcagta atttgggnet ttttcattca acacacgcag catttcataa taaattccca 540  
aaggccattc ct 552

<210> 10439

<211> 538

<212> DNA

<213> Homo sapiens

<400> 10439

aaaaaatgg tattttatta taacttttaa aattgcggaa catcagactg aatatcatca 60  
gacacataca caaaaccact catctctaaa gtcattttct ataccctctc aaaatttggc 120



cagtgagttt tgcctcaggg aattttccag ttcaacccca tacaccaaca tggaataaat 180  
 ggaaacacta gccttttggg ttgcccaca gticcaaagt gctattacag gcggaatata 240  
 tgctgcagga ggtcattctt gctgctgtgg gtgtgagtaa aatgcttagt tccttctaaa 300  
 atcataattg caatatggac ttctgcttca cgctgcatcc taaggcacia atcaggtaac 360  
 ctacatctcc caaatgatca acagagcact ccacccattt ttaccctcaa tgctgagaaa 420  
 ttactcctgg gccccagaagt tgtcacatag gtggccttggg ntacttgggtg ctccagcaca 480  
 actgggcaca nggcccaact tggtagacaca tcaattcctt naatatgtga tncctanaa 538

<210> 10440

<211> 523

<212> DNA

<213> Homo sapiens

<400> 10440

ataaaaacag acaatcaagc gtgacattta atggagttag ttattattgc ttctatttag 60  
 tatcatcaca gattactcat cgctgccatg aagtcataa aatgtgtgac tacctgattc 120  
 ctgggcatct aggacagggt cttttaacct gtcaagtcag ttccattatg gccaattttc 180  
 tagcagtggg tggggatggg gagaggagag ctttgatttt tttgtgtgta gaagaacttt 240  
 ccataagcct gtttggctca tggacatatt ttacaatgta acctccctca gtcactcaga 300  
 ggggatcaag aagggccccc taaaaccagg aggacagatc tagttgggca gcaaaatctg 360  
 gctatttcta gaaatgctcc ctcttcctgc aactgagcag ttgtccccta caagccacta 420  
 aagcccccaa tctttacctg ngaacccatn ttctgactct ggggaatgcc tgcanaagcc 480  
 tggtagggga caanccgtca aaagntgatg aacntgctn ggg 523

<210> 10441

<211> 553

<212> DNA

<213> Homo sapiens

<400> 10441

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aaaagaatga gttacattta ttgatatggt ttgtcatatg ctttataaat ggtcaccctt 60
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caagacaggc tcaaggaggg aaaggacagg ctcaaagtca tcacagtgtg gggctggaat 180
gcagttgccc ttccttcttt ctttttgac atcttccgtc tctagggtga ggaggggtgt 240
aggcacaggc acccaagaca gccgcggtcc agccccggcc ccacctgtgg tctcagtac 300
gccccagagg ccccatcttc cccacataat gaggtgctc catcctctc aaagcccaga 360
cctatttcat aagccccaga cccaccttc acccagggcc ccaagagaac agagctggag 420
acacttctac tcttagcact ggatgccttc tcccttctgn gaactgtang tgggggggtg 480
gaaggcacc ctttaagcan gtcgggggg ctttgaactc caagactctg gaaaccnnta 540
naaantggga agg 553

```

<210> 10442

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10442

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ctttttctc ttttagcagc aagagcctgc tttctgtct cttctcttga cttttccaga 60
tcaagttcct ttaaaagaat actcgattc ttatttgctt ctgcagctg ctggtcttta 120
gccttcacaa tggtttcgac acattgatga cattttttca acagttcctt atctgtaatt 180
gttgctatgt atctcatgca ttctatatca gaagggaact gatttacttc ctttaccaaa 240
tattgaacaa cttttacatg acccttgcca aatgctgaca taagaggtgt gattttccgg 300
ttatctgtg catccacatc agcacctgct tgcactagca actgcacaac atcaaatga 360
cctccattgg atgccagcca aagtggcgta tttccctttt tgttacgaac atcaatgtgg 420
gtccccctat gaatcaggga gttcacaaaa attgnagtga ccttggtggtg tgctatggtn 480
aaagcaagat ctttgaagga aggcccagg gagcntaaca ttnntcctta tcaagaagac 540
tnttcaacct tgnatccctc ana 563

```

<210> 10443

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10443

```

attaaacaaa tatttattaa ccggcccata aaaataatga agttactcac actgagtcct   60
agtccattct gtttttctga ttgcataag caaaggctta agttctggag ccaacccttc  120
agaggtcttg agaatgaatg atgggtaagt ttatttggac aaccagaagg acttttcatc  180
acaactgaag ccattttata atgtagaaat ttctttttcc tattttaagt aaggaaagtc  240
cattcttgag aatatgttgt ccaacaatta aaacactctc aggatttggt acttggttgt  300
gatttatgct gactccgcct tctgttatca ttcgataccc tcggggacca tctggaatgg  360
catttgcttt gcggcaagta tctaggacac ttgttccagg atcgagaaaa aattcagaaa  420
atggagcttc tttaacaac tcttttaact cctgacagac tgaacctccg gggctttaat  480
ctctggggat aaaggcttgg ggacccctt tagcagaatc caatcntttt ggccatgacc  540
agcttggtc                                     549

```

<210> 10444

<211> 537

<212> DNA

<213> Homo sapiens

<400> 10444

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gtacatcagc atctttacaa tattaaagga gccatataca agtctacagc cattgtacac   60
aggatggtga tggctgggga gccccgcca ccagtcctnt gcagtttctc caccgganaa  120
cacttgggga gctgtcacia ggccaggggg ggtccatntt tgggcctgtc gtggggcagg  180
cagcaggtct gcaaggactc ctcagggccca gtcctcactg gaatcagggg tcaanagcgc  240
caggtctgcc tgtgtctggg tctcatcggc aggctagtgt aacaacgtga attaaaactg  300
ggcatattcg catganaaaa ctggagctgg ggatggctcc ctgagctggg gacctagaag  360

```

acgctgctga cagatgggcc ccttcatggt ggggcccatt cctgaggtaa cgtgcaaccc 420  
tgaggctggt cccaacggaa ggagactttt ccagcagccc caggggccag tcccacacag 480  
acnggaattg gaagcccttg gcaacaagtc angggacccg ggaaggcaac cctgacc 537

<210> 10445

<211> 518

<212> DNA

<213> Homo sapiens

<400> 10445

ccggcaagaa atcatgttta ttcacattcc ccaccccacc acctgagagt cactttcact 60  
ccaagccctg ggcctgacag gagggggcca aagagggggg ctgcctaagg cagggcccag 120  
accccacagt gtgggcctct ggagctgtgt ctttactctt gctgccgac aatcccatgc 180  
tctgaaatgc gcacactctg gctccttagt agatgccata ggtgggctca tgactgtccc 240  
tgtaccggtc caggtagcgc aggggctgcc ggtgggggaa gcgcttctgc ttgggggtgt 300  
aagggggcgg ccgcacgaac tcaaacaccg gctcccgcac gtccagaagc tgggtggaaga 360  
tgtaggtgac ggagtcaccc cagcggcact ggaagaagga caagccggct ggagtcacgg 420  
nttcttgng nttcttgnaa aaatcaaaag tgccgaaagg nccctgggcc nacttgatac 480  
aaggtgaagg gccgtcgtnc ttaaaagaat caatcgtt 518

<210> 10446

<211> 569

<212> DNA

<213> Homo sapiens

<400> 10446

agcacaattc cagttttaat gttcaaatca acagcaaaaa ttatgatgga tagcaattca 60  
ttctcactaa aacacagcta atacatgttc cttaaactcat gaaggtaaag tgaaaaaact 120  
aaatagtttg atgaccttag agaaatcatt tattctctct tatactcagt taaatgggag 180

cctggttatac acaatagaga tgagtaataa tgaaggtaaa atgcctggta aaatgcatca 240  
 cagtaggcac ccatcttatt atacacatgt caataaaaat aagcatctat tttttaagg 300  
 aagaaaagaa atgcttctta ataaagctct ggatgaacca tttatcttct ttcaaaaaat 360  
 gtaaaaacac ataaaaaagc attatctgac aaagaaaagt agaaaagatt tttatcttta 420  
 attagagttt gtagtataca cttactttc tgtaatctgc agtgatgaat ctctatgtaa 480  
 acattcagaa aaagagcgaa tactgggtca tgacttatga actataaatt ttggcctgga 540  
 tactaggcca gnacnggttt atacnttn 569

<210> 10447

<211> 557

<212> DNA

<213> Homo sapiens

<400> 10447

aagttactgt aggacttcaa agaactttta atttgctcac gcatactcca aagattttat 60  
 aaaaaaagta tttcttaaac ttagttataa aaagaaggat tccataggca cgaggacccc 120  
 agtgaacaag ttttggaag tgctgctcca cggtgggccc ataagagtct tgtaaagata 180  
 gaaaagtagg ccccaaaaac aaactctttc ccaccagcca tcagttacta tcttcaaac 240  
 tgcagtgtgg gctcaatgtt gtcattctgt actctcctgt cttcagcagg gtttatggta 300  
 ttttccact tgctgggtcaa atctcctgga agaataccct gcctggaaaa agttcactgg 360  
 agtcagaaga tatttgagtg ctagaccct gaattcagta gctagaanan ggggtgccctt 420  
 gctgctgtgg gacaggggag aaccatggnc catccaggca ctctgattcc tggggnittct 480  
 ggcctcatca tcattttcca tgggtnccaa gggggaccct aaaccaattt cctcccgggt 540  
 ttttgagaaa naaacc 557

<210> 10448

<211> 561

<212> DNA

<213> Homo sapiens

<400> 10448

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cagggccaaa acgttttact ttccatttga atttacaacc atatacagac aatatggtaa 60
gatttttagag aaaacagatc atcactacga atatccatat tctgatttct ttgagaacc 120
aagggtgcctt ttaaaatgcg gctttttaga atagcatgtg ttgtttctgt ctgggatcta 180
gatcttgtct gctacaaaac aaatgaacac accctgtgta acaaaatcga attttaacat 240
ttaaatcttg attccaatat tcctgaccta tctcttgtca tatgaaagaa agaagccttt 300
ttttaaaaca aagtttcaat tcagaatfff tacaacaaaa aacaatcctg cgtctactta 360
atatccctgt atatcctcaa aaagcaagtt caggaaatff aaaaatgatt tataaaaggc 420
actgaagtta gcaaaagcat tgggtgggttt tcattttgga ttaaactctg gaaatgttca 480
cagagaaaca actgtgtgag ccagttgccc gtaacaccca ggaagaaccg ncttcaggca 540
gcacctctgg acacttagcn g 561
```

<210> 10449

<211> 519

<212> DNA

<213> Homo sapiens

<400> 10449

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gctcttagaa tagactttat tgacttttagc caagggcagg ccctgagatg ggggtccaga 60
gagagaggct tgggtgggct acgtcctggg ggccagggtg gttctgaggg gtagaaggcc 120
atccacccat tcgcacggct gctccaggag ggcttgccac agctgcttct cctcagggtg 180
ggaatccatc cagggcacct gcagcccata gctgctgccg gtgccaggc tgaggcgtgt 240
gccccccagc tggcggttgg ccaggggccc atgggtccag agggagagct cggcacaagc 300
ctggcgcagg tcagcaggcc caaagccatc gtacaccatg gtgtgattga acacagggt 360
gaggctgcgt cgcacaaccc ttgtacgctg gcggctggcc tggctgtcat cangcagcac 420
gaagcattgt acctaagtgt ccanggatcc tgccgcaacg gcangangtc ccgaacctct 480
ttanccaaaa tgcagnttcc cgtttggggc aanncttgg 519
```

<210> 10450

<211> 453

<212> DNA

<213> Homo sapiens

<400> 10450

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aacagtcaaa gtgcatttta ttgccaacag aacacttcag gaggaaatgc taacacaaag   60
ccaaggcgct ggtgctggct catttttgct cctcctgacc ttggccagta tttggtangc  120
tttccagagc acagggtgaa aggctaaagg gctaggactg ggggtgggggg agcaggaggg  180
catggcagct gctggctctg tcctcccagc ctgggtccac cntcctgcc gttctccttg  240
ggctcaaggg acacacattc gttcaaactc gacgggcaaa gccagggcct agcccactct  300
agccgcaggg tcccctccct gagggccctg gtccagcacc tgggtttctg ggctttttct  360
ggctganctg gagggcctag ggccaagccc actctccgga gggctggaaa ccaccnttn  420
aggtggncan tggggcncgg ccanaacggg gga                                453
```

<210> 10451

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10451

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atacctttta ttttcgttct gttgaatcta cattatacct cacattctct tcctatatgt   60
atagccttta tatacctctt acaaatcaaa gctataagac tatattaaag aaattatgaa  120
aaactattac aattgttttt tcatatgcaa gatggcacta gcattctccc cagaaaggga  180
aggaagaaaa ggtctcattg tactttctct tgaattctcc tttaggggag aaaagtagaa  240
ccttacagct gccagcaatg caaatcttcc cattcatgga atctgggaga agaatatgtt  300
ctttataaat tcacatgaga caaagatgcc aaccagatgc actgattgta gaggtattaa  360
ttttattcaa ggtgacaatt aggccttata aacctccctg ataactata aaaatataaa  420
cagtggtagg ttttattttt aagtgggaga agtcttggct aggtggatgg tgagaatcac  480
```

aatggaaggt aatattaagt tacccggaat ataagtttgg aacnttgaaa ggactttttt 540  
ataggacatt ttaagaaggn 560

<210> 10452

<211> 557

<212> DNA

<213> Homo sapiens

<400> 10452

gagagacaat aggaattttt aatgcatgga caggcctgca gggactctgg gcagacccac 60  
aggtagcagg aagaggcagg gtcccacaaa ctcaataatg tccagcaaaa aagagagaga 120  
agtccttaaa gacccatgct tcctcactgc aaccatcctc agagcttcct tcctggtgct 180  
gaagaggtca aaactgtctc ctctaggggt cagggtcaaaa ctgtccctcc ataggtctcc 240  
tccaggggtc catggcagga agaaagcaga gtgtggcagg aagaaggaag aagagcaaag 300  
gccgcttggt ctccacctga aaacttctgc ctcgggattg acagccatcc ataagaaaag 360  
gtttaaaaag gagagacttt tgatagagtc aaataatatg tgtttcgggc cattgacacc 420  
atcttctcct nacacgtgat tttggtggcc ttgaggatgc tataccacac catgccttgc 480  
aggccggacc ttcttggttg gggcagaaaa gataggcact ggtttcaccc ggntntggat 540  
gtaggcncct ccnagga 557

<210> 10453

<211> 549

<212> DNA

<213> Homo sapiens

<400> 10453

ccagtttttg agagtttatt ccagcaaaaa tctgagaata gtcattccaga aacatgggct 60  
ccagagaaaa ggagtaagtg ctccaaagtt aaaagttaaa gtcccaccag gcatggnggc 120  
tcaatgtag tttttatcct taaaattgcc tgagttctta gaacacagaa aaaacaaatt 180



tgaatgcatt tctaacagct taataattta tatgtcccat tatgatttta gcggaatggt 240  
 ttaaagcaaa gcataattca ctgcaaagat aaacctgaaa aagcaaaciaa acttacaaat 300  
 ggtatgttat gacctagaca aaactgatta tcaactagta atactcataa ttagcacatg 360  
 caacagattg agaaattaaa tcctgngcta tataactctta agtattttgt cagatatatc 420  
 tttaaagtgt ctatcaattg cattcctttc cacacatatt ttaaacagga aaacaatggc 480  
 tttcctccan atctcaaggt tatcaggcaa aacgtgcaat ctcgtaaaaa tgggtatttc 540  
 catggtntt 549

<210> 10454

<211> 491

<212> DNA

<213> Homo sapiens

<400> 10454

ccttttgtat taacttttat ttacctgtta atgaaatcat caaaatacaa tgagtaggca 60  
 ccttctatgt acatctgtcc tagtgctttt gagtgttaat ctaaactcat acatcaaciaa 120  
 acattctagc cggacaagta ggtggctact cagtccatta agaaacttaa ttactagttt 180  
 ctagtagcct taaagtctca tttaacattt aacaaatcaa agagcatgtc agaggctgga 240  
 catcaatggc agatgatgcc aaagtcatag ggttttgcct ttgtgtacag tgcataggct 300  
 ccaaagcatg acctgcacgt cttgatactc aggaattttt ggaaaaagaa aatcacactc 360  
 tttggccact tttaaaaagt gaaaaggtag agccttcatt accctagtag agcttaacct 420  
 aatncantnc aatgaaccaa ncnggaagaa nggcatnttt acaaaccctt ttcaaaaagtc 480  
 attggccagc t 491

<210> 10455

<211> 558

<212> DNA

<213> Homo sapiens

<400> 10455

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agataaaatt aaactgactt tattaacag agtcacttca ggcctttttc ttatgaacag 60
agtgatcctt agtcgggtaa catgtcaatg acagtgcact ctgtgcctct cctgcattgt 120
ggggagggca cttcttaagg caaagtaaaa ttcaggacct gcatgaaatc agttttgctt 180
ccatttgagt tcgatttatg ctattaatag ttctgatcac caaatttata acatttaaag 240
tactgtctgt taccgatgt ctggtatgtt tacataaaac gtggttctgc ccagtaacag 300
cattaagggt aaaaatgggg atttccccta aaattattac catcatgtca tcctagagt 360
gtaccacact gggagaggtc caaaaaacaa agcattagat ttcaggctaa gaacagccag 420
ttttaggagt aagaattaca tcgaatagcc ttaagagcct ttaaaaaggt caaggcttct 480
taaacttcag aaatgaaacc aaaccaaacc aaaccaccnc caaaaccaac ctaccaac 540
ccaaaacttt tggngcca 558

```

<210> 10456

<211> 484

<212> DNA

<213> Homo sapiens

<400> 10456

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caagcaaaaa attattcttt taatacagct tttacaaaaa cagttttaat acatgagtgg 60
ctacaatttt attgtgtaca caatgtgctt atagtcacat gtggcccaat ggatccaaat 120
gcctcctctg gctcatgaaa tcccatgtac ttcacaatct agcctaatcg tgtatatgca 180
taaaagccac tgggtatactt tttacagaca tctttgtata atagtccaga aaaaaaaatc 240
agtgtactt aagaatgttt agacaatttg acatctacgt ttgctttctt ttcttttcag 300
tagtccttct gatgattggg ggcctttatc ccataggttt atactgttaa aacagtacat 360
aaaattacat ttagctttgc ctagagtaat agataaaaaa gggtaaataca cacattttca 420
agaagcttga gaggnaaaaa attgcagcat cgnggnttta aaaaactnnt taagcnngaa 480
aatc 484

```

<210> 10457

<211> 552

<212> DNA

<213> Homo sapiens

<400> 10457

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gagcattcca aatttattcc ctttaagtaa acctatagcc actacatatg tccctgacaa   60
ttagaacaga aaacaaaaaa aggacaaata gaaatacttt ccattctgtc tatatagtag  120
tagttttggg ggtatagata gtaaacta gtcaagaata ctcgtctaaa tatgttggtgta  180
aaatgtagtc atcatttggc atgtgttttg ctttggtata taatgaagtt gagctatccc  240
atctttcttc tctatggaat atagtcacac aaacaaaaaa gatgaatctc actagagggtg  300
ggtctttatc agaaatatgc cccaatctag ttaggtaata gaaagaaaat cattttctcc  360
tcctaggcct aagattcttc atgtaaaaat tataagactg aataaagatc acttctaagt  420
ttctataatt catgtagata tatcaattta tacatcatga ttagacaga cagcaaggct  480
atctttctgg ctccatgatg ctaggcttgg ccacatgact tgcttaaagc accgtatgga  540
tacatgcac tt                                                    552
    
```

<210> 10458

<211> 544

<212> DNA

<213> Homo sapiens

<400> 10458

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ggtatattca tacaatggaa ttttattcag ccatagaaag gaatgaaatt ctgacacatg   60
ctacaacatg ggtaaaccctt gcaaacgcca tgctaaatgg aagcctgact gaccaggggc  120
tcttgggctc tcaatgcaat agaaactgac atggggccaa aagacttccc agacaaagca  180
cgcgagggt agaggatata ggtagcatc atctggttgt gatgatcatc tcgagtaatg  240
ggccacctgg tggctctggcc agcggcaaca aggctgtaaa tcaattaatt attcagcatt  300
ccctcccaag atgggacact ctgcaatctt ggttccctat ttggatctcc taaggccagt  360
tcctggaatt gtttaagtaa aagacatggt taagcattat gagagcacag aagaacaata  420
    
```

cagaaaggcc atcttctttg gatgactaaa gccctnagg tagcangtat ngnggcaatg 480  
 aagnaatant attgggggtt ggatcagtg ggaatgcntg aaaaaagct ctaatggggg 540  
 tgaa 544

<210> 10459

<211> 135

<212> DNA

<213> Homo sapiens

<400> 10459

gcctttcccg ggtgctttat tacacgtgat ggcgaccagt ctacaccaca gactagatcg 60  
 tgcgatgcca cagaagagcc ttcccgcttc cctccacat gtcccccttg ttgggggggg 120  
 ggaagggggn nnnnn 135

<210> 10460

<211> 563

<212> DNA

<213> Homo sapiens

<400> 10460

gtaagtaatg ctgcccgaga acctcttccc aaaaggctct ctgcctcacc tttctcctcc 60  
 tcctcttctt cctcatcttc attctttagg aaaatcccca cattcttcac tttcttcttc 120  
 acagaagtga gaacagtagc tgggccatcc tcattccaaa gcactgtgtc accaatgaac 180  
 agggcatagg tttctctctc tggtcttttc cctccttgt tagtcaggtc tgagaatcct 240  
 aaattgatgc tgaaaacat tccttctctc agtttgtatt gatttttgc attgattact 300  
 aggagcctt cacggaattc aattcccatc ccaaacccta ggttttggg aattttgntc 360  
 aacaagttct ggcttctgct ttttaaccac gtccatgaca agcgttatac acgtcacata 420  
 tcttcacacc atgncctaat tccttcagaa gttcctcttg aagctgggag caaaaggtat 480  
 aatttcttga acttcttgag aaggtcaacc ntcaaaggcg acaaggttgg agccanaana 540

ctgaagcgaa accntggncagg

563

<210> 10461

<211> 553

<212> DNA

<213> Homo sapiens

<400> 10461

gacacagagt cttgctctgt tgcccagact ggagtgcagt ggtgcaatct ctgctcgggtg	60
caacccccac ctcctgggtt caagcgattc tcctgcctca gcctctccag tagctgagat	120
tacaggtgcg caccaccacg ccagctaata tttgtatatt ttagtagaga cagggtttca	180
ccgtggtctc aaactcttga cctcgtgac cgcctgtctc agcctccaa agtgctgggg	240
ttacaggtgt aagccactgc gccagccag taattcttat caaatgaaaa atgatcttca	300
ttcacaatga ctgaccaaac ttctgagttt ccttcagtta attcaaata ctgagggtcaa	360
aatcaccaat gacttttggc ctttggcttt caaagtggga catatcatca aatggcccat	420
atacncaaaa ttacattat agacaaatnc atatttgnca tatgttngaa gcctnattcg	480
tgatttatag gatttaaaaa nctaggctt ttcttaaaag ggatctgaag tcaatagggt	540
nactccacct tgc	553

<210> 10462

<211> 566

<212> DNA

<213> Homo sapiens

<400> 10462

gagacggagc ctcgctctgt caccaggtt ggagtgcagt ggcgcgatct cagctcactg	60
caacaacctc tgcctcctgg attcaagcaa ttctcctgcc tcagcctccc gagtagctgg	120
gattgcaggc atgtgccacc acgcctggct aatttttttg tatttatagt agatatggtg	180
tttcaccata ttggccaggc tggctcaaaa ctcctgacct tgtgatccac ctgcctcaac	240

ctcccaaagt gctaggatta caggtgtgag ccactgcgcc cagccaatta catttttaat 300  
aaccgaata ttacagatca tttccacgtg tccttgcacc ctttatacac atcatatcat 360  
taggttcaac atattttgac ttgttggcct tggcacacac aatccatttg tgtggtttca 420  
ccaaagatga atgtttcgat gtctagtgat ttggttaagg ctcgatcaag cctggggccac 480  
atatagtacc atttaaanga ttcttctaana atagactttc ggatgtgata ctggttnaac 540  
tatgataaag ttggccaact aattgt 566

<210> 10463

<211> 560

<212> DNA

<213> Homo sapiens

<400> 10463

gntttttcca gaatttaata tttttaaaaa gacagaaaat ataaaaatta ccaaaaaaat 60  
gtttaagggt tcattttggg gctaaatact aggactgaaa ctcttttctt gtaattgatt 120  
tatggtaaag agtaaaaata atataaaaaa cacagcagtt atagctgtcc aaatgaaagc 180  
ctatctgcaa aaaggcagga caaggtgggc tgactgagca aatattcaca tcacgacctt 240  
agtaataaat ttcaaatggt ttcagttccc aagatctgaa aagagaatca tcttgacgcg 300  
ttagattcca cttcttcaag aatccactca atgccattca aaaaaccagt cagagtttca 360  
gcctctgtat cctggaccag ccatgggtga tttagaagat tcagacgcag ctcatgagcc 420  
aaataaaaac agggcattct ttacatccc cttgagaaat ccagatnaaa cccaccatgg 480  
nctttccgaa aacccaaagg ctggaactgg catggcctaa tntgagaaaa tcatnttggc 540  
atcangcttt atgacctcan 560

<210> 10464

<211> 30

<212> RNA

<223> Description of Artificial Sequence: an artificially synthesized ol

igo-cap linker sequence

<400> 1

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30

<210> 10465

<211> 42

<212> DNA

<223> Description of Artificial Sequence: an artificially synthesized ol  
igo(dT) primer sequence

<400> 2

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42

<210> 10466

<211> 21

<212> DNA

<223> Description of Artificial Sequence: an artificially synthesized pr  
imer sequence

<400> 3

agcatcgagt cggccttggt g

21

<210> 10467

<211> 21

<212> DNA

<223> Description of Artificial Sequence: an artificially synthesized pr  
imer sequence

<400> 4

gcggctgaag acggcctatg t

21

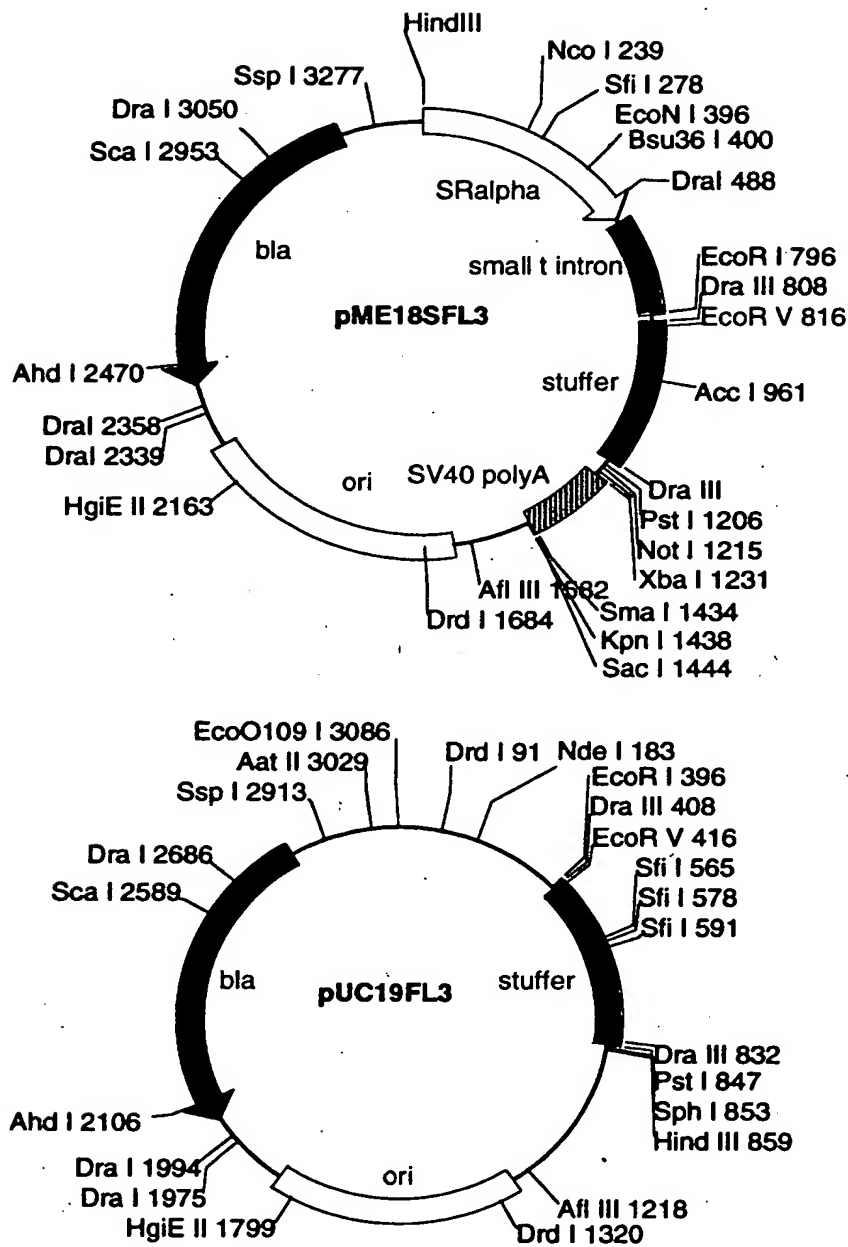
【図面の簡単な説明】

【図 1】 pME18SFL3とpUC19FL3のベクターのマップ



【書類名】 図面

【図 1】



【書類名】 要約書

【要約】

【課題】 全長cDNAを合成することができるプライマーとその用途の提供。

【解決手段】 ヒトのタンパク質をコードする5547のcDNAを単離した。そしてこのcDNAの5'側、および3'側の塩基配列を明らかにした。得られた塩基配列に基づいて、全長cDNA合成用プライマーを提供するとともに、cDNAによってコードされるタンパク質の機能を明らかにした。本発明のcDNAは全長であるため、翻訳開始点を含み、タンパク質の機能解析において有用な情報を与える。

【選択図】 なし

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